

WEEK
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JUN 29 1942

BUSINESS WEEK

JUNE 27, 1942

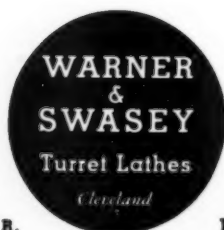
"UNITED WE STAND"

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FASTER, FOR LESS . . . WITH A WARNER & SWASEY

That's what all 21 Warner & Swasey salesmen have been doing for months. It's salesmanship in reverse.

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This Warner & Swasey service has helped many concerns reach full production quotas while still waiting for machine tools they believed were necessary. The service is available to any plant on war work, without cost, and whether or not you are a Warner & Swasey customer. All you need do is write Warner & Swasey, Cleveland, Ohio.

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WASHINGTON BULLETIN

WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

WPB Realigns Its Sights

The War Production Board's reorganization is imminent. It was expected, necessary.

The WPB has finished its big job—setting up the production machinery and ironing out the procurement processes. Now many operations can be left largely to the Army, the Navy, and the war contractors themselves.

Fundamentally, then, the reorganization merely embodies an administrative readjustment to a matured war production program. Emphasis is shifting—in direct relation to the increased rate of arms production—to adaptation of the whole civilian economy to the exactions of war's demands.

The reshuffling is a direct result of what WPB has done, not of what it hasn't done!

Truman Report Is Out of Date

Findings of the Truman committee are outdated. Whatever may have been the effects of WPB's internal weaknesses and squabbles on war production in the past, these have been largely overcome, left behind. Arms production is in the groove. The capacity is there, the techniques have been developed.

Top Men from WPB Help Army

Having got production over the hump, it's only reasonable that WPB should give procurement back to the armed services. You can readily see how the picture has changed, and why, for example, William H. Harrison, chief of WPB's Production Division, is being transferred to the Army.

Harrison gets a colonel's commission, joins Col. Albert J. Browning, former chief of WPB's Purchases Division, who was detailed to the Army weeks ago. Both the WPB men are on the staff of Lt. Gen. Brehon B. Somervell's Services of Supply, where they will keep WPB-trained fingers in the production-procurement pie.

Supply Remains WPB's Job

In relinquishing direct responsibility over production and purchases of arms, WPB will retain full responsibility and authority over the distribution of raw materials. The reason: There never will be enough of the critical materials, and these must be stretched to cover not only military requirements but minimum civilian needs as well.

WPB's province also extends to the

requirements and resources of the United Nations. Consequently, what you have is a reorganization of WPB in which Donald Nelson assumes a position equivalent to Capt. Oliver Lyttelton's in the British Ministry of Supply, and WPB's functions are administered by three, possibly four deputy administrators:

William L. Batt, chairman of WPB's Requirements Committee and American member of the Combined (American-British) Raw Materials Board, would direct the allocation of raw materials.

James S. Knowlson, present director

for the little fellows. Conservation of materials also would head up under this deputy administrator.

Reorganizer Reorganizes

Luther Gulick is the author of the plan for WPB reorganization in broad outline. Gulick was borrowed by Nelson from the National Resources Planning Board six weeks ago to advise him on "simplifying and decentralizing the wide administrative operations of WPB."

Gulick is a veteran reorganizer. He had a hand in reorganizing the government, from the White House down, in 1939. This past spring he helped in the Army's reorganization into Air Forces, Ground Forces, and the Services of Supply.

WPB's evolution is logical but it's full of grief and anger, too, because of the personalities involved and the various pressures which are always at work.

The Army Pushes

You may hear that returning procurement to the Army results from a scramble for power between Nelson and Gen. Somervell, that at one point Batt and Knowlson were ready to quit because they feared an Army dictatorship over the American economy.

It's no secret that the Army would like to take over the entire WPB. That's not likely to happen so long as the President continues to oppose it.

While WPB retains control over raw materials, it will remain in the saddle—but the services keep pushing, pushing. They have been trying to put across a warranty scheme, a sort of stamp plan, for the control of materials and machine tools by the Army-Navy Munitions Board.

That plan has been twice turned down by WPB, but its sponsors have submitted a third version. It proposes that the Army and Navy be permitted to issue warrants and stamps for materials to their prime contractors who, in turn, would pass them along to subcontractors.

WPB Is Still on Top

As reorganization of WPB takes form, these things will become clear:

(1) The WPB's dominant position in the war economy is secure.

(2) Reorganization was at Donald Nelson's option; it wasn't forced on him by critics of WPB, of WPB's staff, or of Nelson himself.

(3) Criticism of WPB is inevitable,

SPECIAL REPORTS

In two succeeding issues, Business Week presents to its readers Reports to Executives on subjects of major interest to them.

• **This Week**—Starting on page 25, "A Guidebook to War Business," which, like Business Week's repeatedly reprinted and widely circulated "Guidebook to Defense" of Mar. 15, 1941, has been prepared in response to a demand from both manufacturers and government officials to spread the latest information on how to handle war business, how to get war contracts and subcontracts.

• **Next Week**—A Report to Executives entitled "Don Nelson's Men," designed to give readers an informative, colorful, behind-the-scenes appraisal of how business executives are serving the nation in the War Production Board and of where they stand in the long Battle of Washington. Illustrated by photographs taken at WPB headquarters with the special cooperation of WPB officials.

of WPB's Division of Industry Operations, would be relieved of that post to serve as Nelson's alternate on the Combined Production and Resources Board—so-called "International WPB."

A third deputy, not yet named at midweek, would take over the Division of Industry Operations. That job calls for integration of the original system of priority ratings, the Production Requirements Plan, and the Allocation Classifications System.

A fourth deputy may be named to take the new Smaller War Plants Corp. under his wing. This is a tough assignment as Congress will keep a sharp eye on what this outfit does—or doesn't do—

VITAL SUPPLIES TO ARMED FORCES PROTECTED WITH ACME PRODUCTS



ACME EQUIPMENT HELPS MEET ARMY DELIVERY DEMANDS

Vitally needed by the armed forces are quantities of medical supplies...quickly! Large orders from the U.S. Army were received by a large pharmaceutical house . . . and to help determine the best way to meet delivery requirements, an Acme engineer was called. (Acme Steelstrap meets all Federal Strapping Specifications.)

The Acme 200 series Steelstrappers were recommended. This equipment automatically tensions and seals the strap with a minimum of movement . . . a seal magazine is built into the tool to provide a constant time-saving flow of metal seals.

RESULT: Delivery dates were met. Shipping kept pace with greatly increased production. A saving of approximately 35% was effected in labor and material as compared with former package reinforcing practices.

Acme Steel products can also help you meet speeded delivery dates . . . and give your important products the protection required. Mail the coupon for your copy of Acme Process News.

ACME STEEL COMPANY —BIRTHPLACE OF MANY WEAPONS OF VICTORY



Parts used in the construction of large quantities of equipment for the U.S. Army start to take form in the mills and processing departments of Acme Steel Company. The steel is then shipped to other industrial plants whose products supply military needs.



The Acme 200 series Steelstrapper provided the speed necessary to meet U.S. Army rush delivery dates for urgently required pharmaceuticals.

PLANTS JAMMED WITH WAR ORDERS USE *Silverstitchers*



Fibre and corrugated containers are extensively used for packing war products. These boxes, however, must first be formed and then closed or sealed for delivery. As wire stitching does both of these jobs quickly, Acme Silverstitchers are becoming increasingly important. Besides its greater speed,

wire stitching assures a strong package. In the picture, a carton, used to hold twelve fins for bombs, is being formed by bottom stitching. Their speed and economy make the new, low-cost Silverstitchers the preferred stitching equipment. Made in special and in standard types . . . Acme Silverstitchers fill every carton stitching requirement.

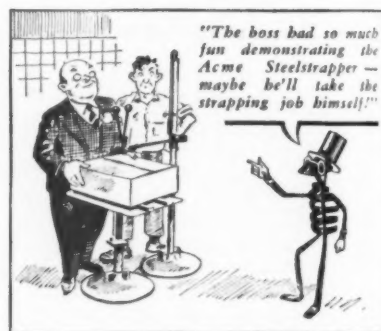
NEWS FLASHES FROM THE PRODUCTION FRONT Acme Field Men Reporting

Acme engineers are assisting a great number of large and small plants to meet Government specifications for the reinforcement of many products destined for the war effort. Their recommendations have helped to send these shipments over rail and wave . . . faster, easier and more economically. The following are excerpts from actual reports:

CALIFORNIA ". . . has another order for 100,000 comforters. Went over specifications and made several suggestions on how to make shipments faster at lower cost. Figured quantities in strap, seals, and stitching wire."

NEW YORK "Thanks to Acme Steelstrap and strapping equipment—were able to complete government order in time. Will start on new order next week."

MICHIGAN ". . . had difficulty with carload shipping. Solved their problem with proper application of Unit-Load Bands. Will work with them on their next big Government shipment."



NEW BOOK ON PACKING OF WAR MATERIALS

The current issue of **ACME PROCESS NEWS** is an illustrated, fact-cramped publication slanted particularly to shippers of war products. It tells them how others are solving packing and shipping problems . . . gives valuable suggestions on how they, too can obtain faster, safer, more economical shipping and packing. Your copy can be had by mailing the coupon.



☐ Send complete information on fast, safe and economical shipments of Victory products.

☐ Mail me a copy of Acme Process News.

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WIRE, SILVERSTITCHERS, STRIP STEEL
AND OTHER STEEL PRODUCTS.

WASHINGTON BULLETIN (Continued)

will continue through every phase of the war effort.

(4) Squawks will be multiplied as WPB's controls bite increasingly into civilian fat.

Settling Aircraft Engine Fight

Peace seems to have been declared on the air-cooled vs. liquid-cooled aircraft-engine battle line. The Navy, which hasn't had a liquid-cooled engine since back in the '30s, has contracted with Aviation Corp. for production of Lycoming engines. They will have a power rating greater than that of the Allison (1,350 hp.) but less than 2,000-plus hp. of the largest air-cooled engines now in operation.

Now that both Army and Navy have both liquid-cooled and air-cooled engines, the years-long controversy should be at an end. There never was much point to it. The liquid-cooled engine, because of its in-line shape, is adaptable to slender, fast planes. There is no advantage in putting a streamlined engine on a thick fuselage. Army has Allison on Bell P-39, Lockheed P-38, and Curtiss-Wright P-40s.

Spur to Forced Savings

The Canadian Parliament is almost sure to support the "forced savings" proposal in the new budget announced in Ottawa Tuesday. Inevitably, this means that the much-debated anti-inflation scheme is bound to be revived in Washington, though possibly not until after the November elections.

Ottawa calls the proposed new tax a "minimum savings requirement," plans to collect it with the regular income taxes, and refund it at some stipulated time after the war with 2% interest.

Britain introduced "forced savings" with the 1941 budget. Its schedules start with a \$30 levy on an income of \$480 a year for a single person and \$52 on married incomes of \$800. Highest amount levied under the graduated British plan is \$260 a year (BW-Apr. 25'42, p38).

A Vote for Tax Refunds

It would be hard to find a better example of compromise than the proposal for postwar credits the House Ways and Means Committee finally devised. The group was committed to the refund in principle, but disagreement over terms was so violent that many observers expected Ways and Means to pass the buck.

The final proposal calls for a refund of 14% of the corporation's excess profits, with the committee standing firm

on its original recommendation of an excess-profits tax of 94%. All this should satisfy the Treasury, which had suggested that anything over 80% should go back to the taxpayer.

Payment will be made by means of a special issue of bonds redeemable after the war. Refunds may not be used to pay dividends or bonuses, nor may they be added to cash reserves unless used in the business.

The proposal won't find many ardent supporters in Congress; by the same token, it won't have many bitter enemies. It does just what it is intended to do—get the baby off the committee's doorstep with the least possible embarrassment.

No Sales Tax—Yet

In the fight over proposals for a federal sales tax, the Treasury took the first round. No sales tax will appear in the Ways and Means Committee version of the 1942 revenue bill. That doesn't settle the issue, however.

Sales tax sentiment is strong in the

Senate Finance Committee. The Ways and Means revenue bill will be a good \$2,000,000,000 short of what the Treasury asked. Congress will be under pressure to make up the difference and a sales tax offers a tempting, painless out.

According to the Treasury's own figures, a 5% levy on retail sales (exempting sales to the federal government) would raise \$3,113,000,000 a year. But, from the Treasury's viewpoint, the sales tax is unfair because it is highly regressive. A tax that would take 10% of a \$500 income would get only 2.7% of a \$10,000 income. The Treasury also shies away from setting up the big administrative machine needed to enforce a retail levy.

Arithmetic of Withholding Tax

Complicated arithmetic obscures the Ways and Means Committee decision on the withholding tax, but the arithmetic works out to give the Treasury pretty much what it wants. If the proposal goes through, a large part of the personal income tax will be collected

Price Subsidy—by Proxy

A month ago, the Office of Price Administration permitted canners to raise prices on specified lines 8% and more above ceiling prices set by the General Maximum Price Regulation (BW-May23'42, p13). True to its promise not to permit increases in ultimate costs to consumers, OPA permitted no such price increases at the wholesale level. Hence, wholesalers were caught in a squeeze; they had to pay canners an additional 8% or more for peas and beans but couldn't collect from retailers.

The only way to rescue wholesalers was to give them some sort of subsidy. But Congress has bluntly refused to let the Reconstruction Finance Corp. and the Commodity Credit Corp. distribute such subsidies when so ordered by OPA.

With wholesalers refusing to handle canned goods, the government had to find some way out of the hole. This week it succeeded. The Department of Agriculture, backed by the President, will buy canned vegetables at 92% of the canners' new ceiling prices or roughly at the same level which prevailed before the recent boost. It is expected to resell these goods at the same price to wholesalers, whose margins will thus remain essentially what they were when GMPR was first promulgated.

This plan is obviously only a temporary expedient. It cannot be applied generally to eliminate unfair discriminations imposed on various segments of business by the uniform freezing of prices under GMPR at their highest levels of last March. By and large, the retailers and wholesalers are likely to suffer most, for their March prices were based in many instances not on manufacturers' March prices but on lower quotations which prevailed weeks or months earlier. The canners were a special case. They got caught in a squeeze because of the advance in raw-material prices between the 1941 and 1942 packs; agricultural prices cannot be frozen under GMPR.

Ultimately, Congress will have to provide subsidies on a permanent basis. Rejection of the first measure was interpreted as a personal slap at Henderson, who stepped on tender congressmen's toes, principally in patronage. A new bill is in the works on Capitol Hill. It will specifically authorize subsidies out of RFC and CCC funds on certification by OPA. Criterion for payments will be maintaining flow of essential civilian products. Beneficiaries will be pledged to cut costs by simplification of products and other means during the subsidy period so that it can be removed.

Dependability



You can depend on Willson Safety Devices. They are designed and tested in one of the largest and best equipped laboratories of its kind in the world.

For dependable protection consult your local Willson Representative on all your Industrial Goggle and Respirator problems.



GOGGLES • RESPIRATORS • GAS MASKS • HELMETS

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WASHINGTON BULLETIN (Continued)

before the taxpayer ever sees the income.

Biggest objection to the withholding tax was that individuals would have to pay two years' taxes in the first year after it went into effect. To get around this, the committee proposal allows two years for adjustment.

Collection at the source would begin in January, 1943. As quarterly installments of the tax on 1942 income fall due, taxpayers could offset against them half the amount collected at the source in the preceding quarter. This means that half of what is withheld in 1943 would be applied to 1942 taxes, half to 1943 taxes. In 1944, all collections at the source would apply against 1944 taxes. In the two transition years, individuals in the lower brackets would pay about 30% more than they would have under the old system.

Kind Words For Advertising

"For the duration, there will be a diminution of product advertising, but this does not mean an end of advertising...."

This statement set the tone of a cheering message from President Roosevelt to the Advertising Federation of America as it met in New York this week. Continued the President:

"If members will, wherever possible, assist in the war program and continue the splendid spirit of cooperation... advertising will have a worthwhile and patriotic place in the nation's total war effort."

This followed reassuring statements by Leon Henderson and other New Dealers who had been considered "anti-advertising." If there are backflips, there are reasons. Washington knows the job advertising is doing for the salvage campaigns (page 20). Moreover, advertising has a friend at court in Secretary Morgenthau, who is well aware of the help he is getting on War Bond promotion.

Grade-Labeling Bobs Up Again

The food industry has long been jittery lest price control lead down the road to grade-labeling and standardization. First indication that these jitters have some foundation came with OPA's special ceiling on packer and wholesaler meat prices.

As part of the regulation, OPA requires all wholesale meat cuts to be labeled with Agricultural Marketing Administration letter grades. The meat regulation follows reports that OPA's consumer division is reorganizing its Standards Section so as to provide standards on which price control could be based.

NLRB's Biggest Election

Even more interesting to Washington than the landslide vote in the Big Steel labor election (108,043 for the union, 7,729 against) was the subsequent exchange of bouquets between the National Labor Relations Board and the company. Feeling pretty good because its biggest poll had come off without a hitch, NLRB credited U. S. Steel with unstinted "cooperation in every way." The corporation in turn said NLRB had done its work in "an excellent fashion."

Jubilant United Steel Workers of America (formerly S.W.O.C.) had nothing official to say about carrying every one of the 47 plants, yards, and warehouses polled (including those of eight subsidiaries). The steel workers were all set to cash in as soon as the formality of certification was completed.

New Salvage Drive For Fats

Sooner or later the collection and salvaging of waste materials will be consolidated in a nationwide system. It's shaping up now in WPB's Bureau of Conservation.

Meanwhile the fifth specific campaign, a drive for household fat drippings (page 20), will get under way before mid-July or as soon as 300,000 butchers, 4,000 frozen food locker plants, and the rendering industry have been educated.

Out of two billion pounds of grease that go down the kitchen sink annually WPB hopes to steer 500,000,000 pounds to the renderer, 12% of which will be glycerine, the rest inedible fatty acids for paints, linoleums, and plastics.

First four scrap campaigns covered metals, waste paper, rags, and rubber. Only one successful enough thus far to reach a halting point was waste paper.

For Their Own Good

Here's a hint of WPB's future rôle: For the first time, it has publicly and formally admitted that one of its orders was drawn with an eye on postwar economic conditions. The order, relatively unimportant in itself, deals with honey quotas for use by the food industry. WPB's announcement said it is necessary "to safeguard the beekeeping industry against recurrence of the economic unsettlement it experienced during and after World War I."

Whenever sugar is rationed, food industry men turn to honey, but leave it when sugar becomes plentiful again. Apparently WPB is trying to prevent a recurrence of the post-war honey letdown.

—Business Week's
Washington Bureau

FIGURES OF THE WEEK

THE INDEX (see chart below) $\frac{1}{2}$ Latest Week 181.4 Preceding Week 182.1 Month Ago 181.0 6 Months Ago 164.1 Year Ago 159.1

PRODUCTION

Steel Ingot Operations (% of capacity).....	98.0	98.3	99.6	93.4	99.9
Production of Automobiles and Trucks.....	23,225	22,300	21,600	65,875	133,565
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$42,128	\$42,319	\$43,524	\$11,726	\$24,551
Electric Power Output (million kilowatt-hours).....	3,434	3,464	3,380	3,495	3,092
Crude Oil (daily average, 1,000 bbls.).....	3,721	3,700	3,599	4,314	3,858
Bituminous Coal (daily average, 1,000 tons).....	1,882	1,863	1,913	1,817	1,692

TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	79	80	79	87	88
All Other Carloadings (daily average, 1,000 cars).....	60	62	61	47	56
Money in Circulation (Wednesday series, millions).....	\$12,208	\$12,176	\$11,888	\$11,023	\$9,433
Department Store Sales (change from same week of preceding year).....	-3%	+7%	+5%	+2%	+13%
Business Failures (Dun & Bradstreet, number).....	180	173	230	217	230

PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	229.4	228.4	231.7	216.9	201.2
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	154.1	153.0	153.0	148.9	141.0
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	180.3	181.0	185.5	170.2	146.3
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.042¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.14	\$1.12	\$1.13	\$1.22	\$0.94
Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.50¢	3.52¢
Cotton (middling, ten designated markets, lb.).....	19.00¢	18.71¢	19.76¢	17.37¢	14.26¢
Wool Tops (New York, lb.).....	\$1.191	\$1.187	\$1.226	\$1.281	\$1.263
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	21.75¢

FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	66.2	66.6	63.8	67.0	78.3
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	4.33%	4.33%	4.29%	4.41%	4.30%
High Grade Corporate Bond Yield (30 Aaa issues Moody's).....	2.84%	2.85%	2.85%	2.83%	2.76%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years)	2.32%	2.32%	2.34%	2.39%	2.23%
U. S. Treasury 3-to-5-year Note Yield (taxable).....	1.17%	1.17%	1.04%	1.02%	0.68%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	$\frac{1}{8}$ - $\frac{1}{4}$ %	$\frac{1}{8}$ - $\frac{1}{4}$ %	$\frac{1}{8}$ %	$\frac{1}{8}$ - $\frac{1}{4}$ %	$\frac{1}{8}$ - $\frac{1}{4}$ %

BANKING (Millions of dollars)

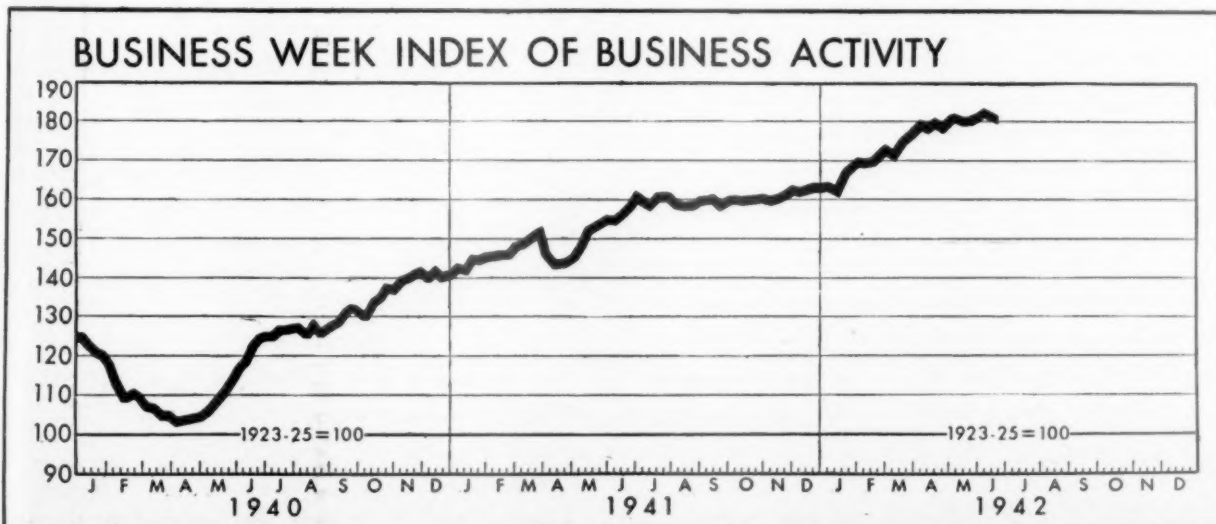
Demand Deposits Adjusted, reporting member banks.....	26,058	26,022	25,395	24,060	23,872
Total Loans and Investments, reporting member banks.....	31,677	31,736	31,888	30,306	28,155
Commercial and Agricultural Loans, reporting member banks.....	6,546	6,552	6,613	6,769	5,792
Securities Loans, reporting member banks.....	838	879	917	969	915
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks...	17,364	17,346	17,210	15,219	14,287
Other Securities Held, reporting member banks.....	3,537	3,546	3,666	3,658	3,606
Excess Reserves, all member banks (Wednesday series).....	2,790	2,780	2,565	3,085	5,314
Total Federal Reserve Credit Outstanding (Wednesday series).....	2,803	2,708	2,578	2,433	2,241

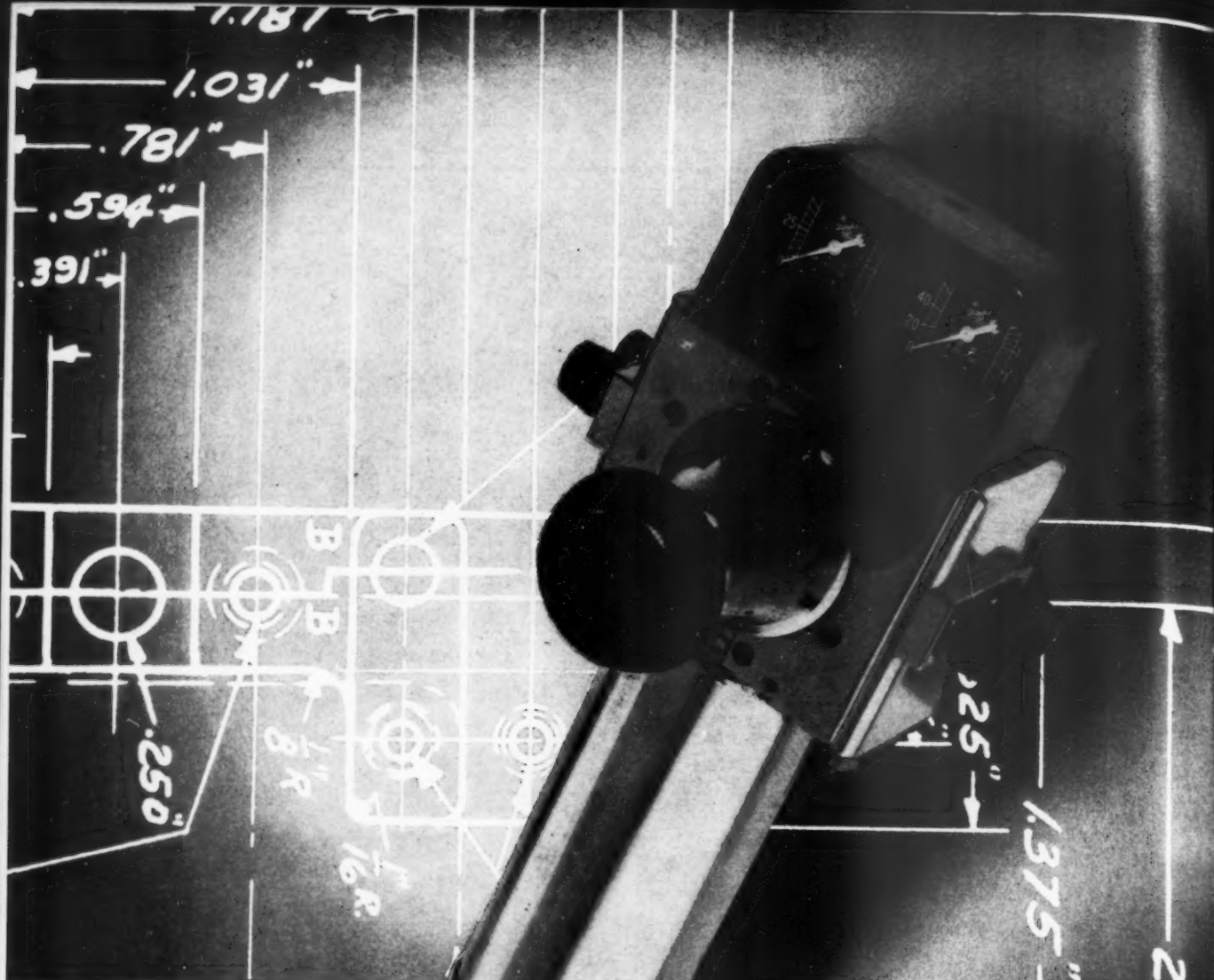
*Preliminary, week ended June 20th.

† Revised.

§ Date for "Latest Week" on each series on request.

‡ Ceiling fixed by government.





IT TAKES MORE THAN BLUEPRINT

MAKING plastics parts is not just a simple transition from blueprint to finished part. It is a difficult job involving many factors and dependent on the smooth functioning of each for a satisfactory product. It is a job in which the importance of engineering cannot be underestimated.

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P L A S T I C S
GENERAL



D E P A R T M E N T
ELECTRIC

THE OUTLOOK

War Changes Stir Home Front

Production plans and tempo of regulation are likely to be quickly affected by any decisive developments on battle front. Some plants in retooling stage. More civilian controls.

The dog days of the war are here. That fact—driven home by the British collapse in Libya—this week overshadowed even the Roosevelt-Churchill conferences and much more such domestic developments as the approval by the House Ways and Means Committee of the withholding-tax principle, the move for aircraft-pay stabilization (page 72), and the new price ceiling for such retail services as auto repair, laundries, and tailoring.

Home-Front Tempo

The business outlook is the war outlook today, and if the summer war news continues to run against the United Nations, we may expect an immediate step-up in the tempo of control on the home front. Gasoline rationing, passage of the tax bill, drafting of 18- and 19-year olds, manpower mobilization for war industry, and other measures which have grown less feasible politically in the face of rising optimism on war prospects and nearing election dates, would unquestionably be speeded.

What's more, it's time even this early to assess the effects on the war effort here of a possible Axis cleanup in the Middle East (page 15). Right now, we're expanding our armed forces, constructing new war facilities, and speeding production of finished war implements as fast as possible. If by next year we have succeeded in "penning the German Army in a ring of our offensive steel," as Harry Hopkins predicted this week, production strategy may be to concentrate manpower and materials primarily on direct war output for immediate use, at the expense of further building of Army and arms facilities (BW—May 30 '42, p13).

For a Long Pull

But if, by 1943, we are cut off from Russian and Chinese manpower, and reduced to a long-range, drawnout slugfest with an economically-strengthened Axis, not only would production controls have to be greatly intensified, but the whole emphasis of our effort might have to be altered. Then, the American armed forces and their housing and training facilities would have to be enormously enlarged. And, we would have to set aside additional current output towards expanding capacity of such basic critical

materials as aluminum, steel plate, and synthetic rubber, instead of limitlessly stockpiling finished war implements that might become obsolescent before they were used.

For, one lesson of recent months is that, in modern mechanized war, development of design cannot stop. The shift in naval plans from battleships to aircraft carriers is one indication. And the British paid dearly in Libya both for Allied failure to mass-produce dive-bombers sooner, and for Germany's success in developing a new mobile 88-millimeter anti-tank gun.

Trend to Retooling

The trend toward the retooling stage in war production is accelerating, now that we are beyond the tooling-up and mass-production stages. We have already

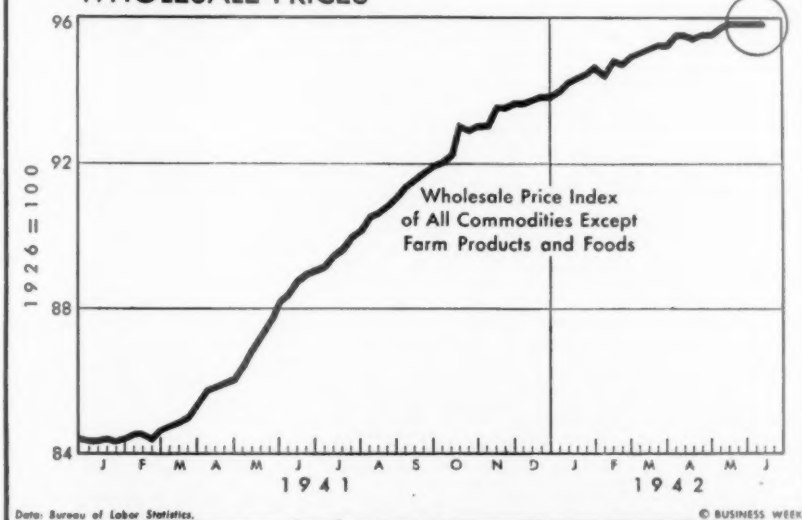
had a string of Boeing B-17's and Curtiss P-40's, and a model shift in medium tanks from M-3 to M-4.

The Murray Corp. is in the middle of a typical changeover. After long preparation, the company's aircraft parts production finally hit its stride this spring, but must come to a halt this September, as the Army is shifting to a different type of plane. Retooling is well under way, but new parts output must wait until the assemblers are ready. In the meantime, materials will go elsewhere.

Shortage Spots

Meanwhile, the war pinch on those materials is tightening. Steel operations have dropped 1.3 points in two weeks, to 98.0% of capacity, due to scrap shortages and furnace shutdowns for repairs. Cotton textile output fell off from April to May, when the mills hastily converted from certain civilian fabrics to military types. And lumber production continues to run below last summer's peak, and below the currently augmented demand. The War Production Board is working to overcome the labor and equipment bottlenecks in lum-

IN THE OUTLOOK: WHOLESALE PRICES



Here's the box score on the price freeze. Since May 11, non-agricultural quotations have held absolutely steady. That's something which piecemeal control, for all its moderating effects on the rise, could not do in 15 months before. But Administrator Henderson can't be sure how long he can keep the indexes on an even keel.

Upsetting factors include demands for higher agricultural prices and wage rates, the reluctance of Congress to provide subsidies to absorb that pressure, the legislators' delaying tactics with Office of Price Administration funds for policing, and the widening gap between buying power and purchasable goods.

ber, Nelson has appointed a "czar" for the West Coast industry, and WPB is considering allocating the important wood types in shortest supply.

With imports cut down, domestic hides also are scarce, and an allocations program is probable before long. And to stretch short woolen supplies for civilians, both the OPA, in its new price regulation for apparel fabrics, and the WPB, in a pending revision of its new-wool allocations, are placing a bonus on blending with reused wool, rayon, etc. In April, the industry was already producing twice as much fabric, with half as much new wool, as the average for the first three months of 1942.

Shift in Emphasis

In the face of mounting shortages right down the line, this type of regulation of the civilian economy will be a growing task for the WPB. And, the emphasis is subtly shifting from curtailment of civilian supply for the benefit of war production to the maintenance of minimum requirements on the home front.

The war housing program is bogging down, and tires and clothing will become acute problems in a long war. Even food supply—as the transport system and farm manpower are strained to the limit—could become one. In a long-drawn conflict, the need of dealing with such shortages of physical necessities would prove as vital as building tanks and planes.

Sugar Fiasco

Administration undertook rationing mostly to learn a new technique, and now it finds the supply piling up alarmingly.

The sugar supply is better than most people realize. Rationing can be justified only by stressing the hazards of shipments from the West Indies—and that can be licked by drafting shallow, small craft that are almost submarine-proof.

• **Supplies Get Troublesome**—Stocks of refined sugar have piled up in warehouses to the point where refiners are obliged to turn away raw cargoes. Consequently, refineries are operating at a third of capacity. Starting July 1, eastern refineries will concentrate production in a few plants and close down the rest.

The antirationing bloc, which includes the anti-Roosevelts and anti-Hendersons, is unlimbering for the attack. But the Administration may admit defeat in advance by upping the ration, thus saving the principle and getting rid of accumulated sugar.

• **Consumers Satisfied**—Essentially, the nation is living off its prerationing sugar,



CONFeree

Winston Churchill—a Washington conferee on "the war, the conduct of the war, and the winning of the war."

and is, moreover, cooled down materially by knowledge that sugar will be available up to rationed amounts which thus far appear to satisfy consumers, if not industrial users. Movement into consuming hands, consequently, is so slow that refiners are getting lonesome for business as sugar stocks pile up on them.

Order M-55 rationing sugar at the manufacturers' level and consumer rationing by the Office of Price Administration were aimed at holding United States sugar use to 5,000,000 tons on the theory that only 5,300,000 tons would be available during 1942. Now 1942 stocks which may be used look like 8,500,000 tons, not only better than the supposed base for rationing plans, but better than average.

• **The Story in Figures**—Here is the statistical picture for the calendar year 1942: Cuba can provide 3,300,000 tons; the domestic beet industry will furnish 1,800,000 tons (1,350,000 tons from last fall's harvest plus 450,000 tons to be ready before December 31 from the coming crop of 1,800,000); Puerto Rico has 1,100,000 tons available; Hawaii can supply 800,000 tons, and Louisiana and Florida cane producers will supply 700,000 tons out of carryover plus what can be harvested and refined before the year's end. Heavy over-buying in 1941 raised invisible stocks to around 800,000 tons.

Deduct a liberal 500,000 tons for lend-lease shipments and there still remains 8,000,000 tons for American consumers, about as much as was bought (but not consumed) in the abnormal sugar-rush year of 1941. This is without adding a jump of 288,000 tons of raw sugar equivalent in the edible sirups and honey production over the 1941 level.

• **Will There Be Ships?**—Question remains whether insular sugar can be

fully counted on in the supply column. The Office of Price Administration, resisting change or abolition of sugar rationing, says no, that additional sugar ships will be diverted to other war hauling, and further losses by torpedo are to be expected.

Refuting factor here is that Hawaii has shipped us more sugar since Jan. 1 than we expected by 100%. Also pressure for small craft transport from the West Indies is acute since refusal to take sugar out of these islands would have repercussions in employment and politics.

• **Some Users Have Enough**—The thing bearing hardest on current movement out of refiners' hands is slow sugar demand. Stocked-up industrial users in many cases failed even to register for sugar, are now working on inventories of sugar that did not enter supply calculations. Many housewives probably went light in reporting kitchen stocks to sugar boards, and now are in the habit of saving sugar even to the point of not using full coupons.

Canning and preserving quotas are not being requested from boards, partly because getting sugar is more trouble than a few quarts of jam or sirup peaches are worth. (Note the market sufferings of Carolina berry growers with unwanted crops recently.)

• **Grain Supplies the Alcohol**—The major impending deficiency in sugar was averted when the War Production Board's plan to use Cuban sugar for war-needed alcohol, via industrial alcohol makers, was junked. Except for the usual use of blackstrap molasses (a by-product of sugar refining which goes to alcohol anyway) the alcohol production program now has been shifted entirely to grain.

Industrial alcohol plants will make alcohol direct from grains within their own plants as well as from the high wines (low-proof whiskey) supplied by distilleries. WPB also is giving thought to utilizing idle sugar refineries to boost alcohol output from grain.

• **Learning a Technique**—From the outset the Administration was for rationing sugar in order to gain experience in the technique of distributing consumer goods in wartime (a lesson which it failed to apply in gas rationing), and incidentally to boost war spirit.

Probably the Administration couldn't have been completely frank in its presentation of the case for sugar rationing and still have received the full cooperation of rationees. It was apparent, when sugar rationing was instituted seven weeks ago, that domestic and Cuban production would be record-breaking and supplies not as bad as it was made out. The case was backed, nevertheless, by "shortages" of sugar and shipping.

Rationing was not necessary, was too late, and has worked too well.

War's Four Crucial Months

Nazis' new gains in Middle East, timed to coincide with Japan's seizure of islands in Aleutian chain, reemphasize fact that United Nations must hold until fall or face prolonged war.

The war has entered its most critical phase.

Tobruk has fallen to the Nazis. Axis troops, with superior supplies of tanks and guns, have reached the Egyptian border. And thousands of German paratroopers, based in Greece and Crete, were ready for the vast Middle East offensive designed to drive the British from Egypt and the Mediterranean, carry the Nazis to the vital oil supplies of Iraq and Iran, and make possible a junction with the Japanese somewhere in the Indian Ocean (BW—Mar. 14 '42, p. 4).

• **Two Routes to the Levant**—Axis strategy is clear. Russia has not been the pushover that Hitler expected. A year after the Germans crossed the Soviet borders, they still had not conquered European Russia—a job they had expected to accomplish in four months.

Even now, the Russians are resisting the renewed and intensified Nazi drive in the Ukraine with a fierceness Hitler fears he cannot overcome. This accounts for his new tactics—an effort to attack Russia's most vital area, the oil fields of the Caucasus, from the rear. To do this he must move either through Turkey or by way of Egypt, Palestine, Syria, and Iraq—or both.

Sevastopol is the key to the new plan. During the first Nazi sweep across Russia, the Germans thought they could afford to bypass this major Soviet Black Sea naval base and push their drive toward the Caucasus along an all-land route. But last winter when they lost Rostov and could no longer beat their way east from Kharkov, it became apparent that Germany would have to count on moving both men and supplies across the Black Sea. Then, the siege of Sevastopol began, for without this base it would be impossible to control the Black Sea.

• **Joint Axis Action**—But Germany is not acting alone. Axis strategy is again carefully coordinated. Even while Prime Minister Churchill was in Washington soliciting more United States aid to meet the present desperate crisis in the Mediterranean, Japan attacked and took two of the Aleutian Islands (page 42). As if to warn the United States of the potential significance of this move, a Nipponese submarine shelled a telegraph and wireless terminal near Vancouver, Canada, and a fortified area on the Oregon coast.

However serious the loss of Attu and Kiska in the Aleutians may prove to be, Washington is far more concerned over

the Japanese gains along the Chinese front. Chungking has warned that Chiang Kai-shek's forces cannot hold out indefinitely without supplies of planes, tanks, gasoline, guns, and munitions—almost all of which must be flown into China since Burma fell to the Japanese.

• **Middle East Major Battlefield**—Critical as China's plight is, it is clear now that the next great battles of this war are going to be fought in the Middle East, with Germany taking over the main initiative from the Japanese after six months during which Berlin has re-

equipped its forces, pushed fresh supplies of men and material into Libya, turned Bulgaria, Greece, and Crete into great ammunition dumps, and figured out the details of the alternate plan for the summer campaign.

Hitler was forced into the backdoor campaign for the Middle East by his failure to crack the Russians in the Ukraine. Yet there are objectives along the new route which, if attained, will be of inestimable value to the Axis.

• **What's at Stake**—The first of these is Egypt. If Britain loses its naval base at Alexandria, and Suez, its lifeline through the Mediterranean will be irreparably cut, Malta will fall, and Gibraltar will be reduced to a relatively insignificant outpost, serving only to help protect the Atlantic supply route to Cape Town. The Axis will have undisputed right of way across the Mediterranean to the raw-materials supplies of Africa. Egypt



SHIPS FOR THE DESERT

As a result of reports on tank warfare in the Libyan campaign, it is expected that the new 28-ton M-3 medium tanks, called General Grants by the

British, will bear heavier guns and armor. These M-3's are rolling off the assembly line at the Chrysler-operated tank arsenal, while an addition to the building is being constructed in the background at right to speed output.



SOMEWHERE IN IRAN

Allied war supplies are moving into the U.S.S.R. via Iran in ever increasing quantities. Supplies come in by the Trans-Iranian Railway and by truck

convoy, and are transported across salt marsh and desert to Ahwaz where they join the flow of supplies coming up the river from Kharramshah. Thence they go northward to the vital battlefronts of the Soviet Union.

itself will provide desperately needed cotton, oil, and food. The French colonies of Tunisia and Algeria, together with Spanish Morocco, can supply fresh fruit and vegetables and such vital raw materials as iron ore and chrome.

Moreover, if Egypt goes, there is almost no hope of holding Palestine, Syria, and the great barren stretches of land reaching out to India. In this zone is not only a backdoor approach to Russia but one of the world's great oil fields spread out along the shores of the Persian Gulf and the Euphrates River.

The Iran field alone is the fourth largest in the world and is the last source of supply for the United Nations in this part of the world. Without it, the British fleet could not operate effectively in the Indian Ocean, the last hope of defending India and of flying supplies to China would be virtually obliterated, and the possibility of defending even South Africa would be seriously threatened.

• **Uniting Japan and Germany**—There are even more serious implications in a Nazi conquest of the Middle East. Japan and Germany could make a junction in the Indian Ocean which would permit Japan to swap some of its surplus tin, rubber, coffee, spices, kapok, hemp, rice, and vegetable oils for the mining equipment, machine tools, airplane engines, heavy guns, and oil refining equipment which it desperately needs if it is going to exploit its rich new conquests.

If this happens, London, Moscow, and Washington know that the war will

be indefinitely prolonged. They would no longer control the bulk of the world's raw materials and be able, in time, to starve out their enemies. Even the superior productive capacity of the United States would be partially counterbalanced by our long lines of communication and the lack of bases from which to launch an all-out offensive against the Axis (BW—Mar. 14 '42, p. 40).

• **Opening for Tokyo**—Japan's new moves are neatly tied into this over-all strategy. The successful campaign in Burma cut the Chinese off from all but an insignificant trickle of supplies and seriously jeopardized Chiang Kai-shek's ability to use any mechanized equipment; Burma oil, hauled over the Burma Road, was the only supply China had.

Now Tokyo is comparatively free to concentrate on China. The threat to its rear in India is relieved by Britain's inability to divert supplies from the Mediterranean front, and the United States is wholly unprepared to equip what might be a dangerously active front in Australia. If the stubborn resistance of Chungking can be eliminated for two or three months during which Germany tries to fight its way through the Middle East, Tokyo will be vastly strengthened to meet any threat from the United States or Russia.

• **Drive on U. S. Bases**—There are two reasons for this week's Nipponese moves in the Pacific. Tokyo's vast fleet has no major task in southeastern Asia during the next few months when the monsoon season makes it unfeasible to carry

on an offensive against Australia or India. It is a part of Tokyo's boldly publicized program to grab our Pacific island bases and Alaska while we are absorbed elsewhere.

Right now seems to be the ideal time with our one-ocean Navy spread over the seven seas and with the Nipponese relatively unoccupied. This accounts for the successful occupation of two Aleutian islands this week and for the serious new threat to Hawaii which caused Washington to order all non-essential civilians to leave the islands.

• **Coming Closer Home**—Because the United States cannot afford even momentarily to relax its guard on Hawaii, Midway, or Panama, the Alaskan thrust of the Japanese may be pushed even closer to the United States. With the limited number of ships, planes, and men now available, Washington has an extremely difficult task trying to prevent Japanese landings on the long and exposed Alaskan and Aleutian coasts. Alaska alone is one-fifth the size of the United States and has a population of barely 65,000. Japanese sailors are thoroughly familiar with the surrounding seas for their great, modern floating canneries have fished these waters for years. They are bound to be active in the Pacific until United States fleet and air reinforcements give us an advantage over them again.

• **Fresh Doubts Appear**—The week's news—particularly from the Middle East—has raised fresh doubts among business leaders and war planners about the possibility of a quick Axis defeat, despite the widespread optimism of a few weeks ago.

Actually, the picture has changed little, but most executives failed to see the full significance of the Japanese rout of the United Nations in Burma, or they interpreted the Russian offensive at Kharkov a month ago as a major German defeat which signalled the end of Hitler's offensive powers.

• **In the Balance**—The outcome of the war is yet to be decided, but the battles on which the decision rests will be fought during the next four months. If the Nazis are able to take Egypt and Suez, and break through to the Middle East, the war will be prolonged and it will be necessary for the United Nations to revamp their strategy and resume their expansion program in the war industries.

But if the enemy fails to make major gains this summer and to complete a junction in the Middle East, the United Nations can continue present policies, confident that they are geared now to a production program which can eventually overwhelm each end of the Axis.

Momentous decisions will be reached in Washington this week. On them, and on the ability of the United Nations to carry them out in the critical months ahead will depend the course of business for a long time to come.

Hidden Inflation

That's OPA's problem as ceiling-pinched manufacturers seek salvation in long-margin lines or in lower quality.

Price Administrator Leon Henderson so far has made good his promise. He hasn't cracked any retail price ceilings barring only such specialized exceptions as certain canned goods whose old ceilings interfered with prices paid to farmers).

But in order to sit so tightly on the lid, Henderson has had to stretch and squirm like an acrobat.

• **No Subsidy Money**—In the first place, OPA has no money for subsidies. A bill to give the Reconstruction Finance Corp. \$5,000,000,000 to alleviate "squeezes" died a quick death. In the next place, OPA doesn't want retail ceilings pierced. What these two factors add up to is this: as soon as a "squeeze" develops, manufacturers tend to seek salvation in (1) higher price lines with longer margins, or (2) deterioration of quality.

Gloomily OPA's General Counsel David Ginsburg told the National Retail Dry Goods Assn. last week that the makers of pottery, glassware, lamps, furniture, stoves, floor coverings, baby carriages, and certain textile and apparel items are already "trading up" or bringing out new models to fit the high price brackets. This, of course, can be called hidden inflation.

• **Henderson's Choices**—Henderson is therefore faced with the necessity of shifting strategy. He could crack his cherished retail price ceiling, which he probably won't do because one hole in the dam might grow into a tremendous breach. He could wait until Congress is in a mood for subsidies, but even subsidies aren't a sure cure by themselves. He could ask manufacturers, wholesalers, and retailers to share their burden, which he already has done on numerous occasions. And he could get really tough and demand "victory" or "standardized" models which would prevent hidden price increases while forcibly setting gross margins at all levels of trade.

No one of these alternatives is a panacea. But the moneyless, shoe-string wizardry that OPA is currently using to keep a lid on retail prices will, according to OPA's own implied admission, lead to trouble if practiced too long. Something new has to be added to smoke out the hidden price increases.

• **Three Expedients**—The history of OPA's treatment of squeezes to date falls into three categories, one of which is considered an admirable success, another a makeshift semi-flop, and the third an experiment not yet subject to

judgment. The first of these expedients consisted of cutting manufacturers' profits. The second involved freezing of price lines and blinking at quality. The third was a veritable "roll forward" of manufacturers' prices with a guarantee by the Department of Agriculture to buy up the merchandise if wholesalers and retailers got balky over the new (and higher) price.

Cutting of profits has been employed in two instances without any trouble. The first example occurred when processors' prices on refined lard were moved from a March to a February base date in order to give wholesalers and retailers a better margin. Next, the three biggest soap manufacturers—Procter & Gamble, Lever Bros., and Colgate-Palmolive-Peet—voluntarily got together with OPA to rescind a 34% price increase instituted in February and March. This shoved their quotations back to February 28 levels, and got distributors out of a bad jam (BW—Jun20'42,p62). Smaller soap manufacturers meantime were likewise eliminating price increases on their own account.

• **As Regards Clothing**—Far more difficult has been the situation with respect to clothing, where "trading up" and cutting on quality are such inviting expedients that—for lack of any other solution—OPA has indirectly given them the nod.

The trouble with pricing clothes—especially women's and children's garments—is that they are seasonal. That means that every time a new season rolls around, OPA is pestered to set a new

price. And every time a new price is suggested, it perforce is a higher one because in the meantime labor and raw material costs have risen.

• **Seasonal Problem**—The first time the seasonal problem came up, OPA ruled that the sellers (including, in this instance, sellers of toys, furniture, and miscellaneous items) should apply last season's markups against latest costs (BW—May23'42,p66). This didn't raise retail ceilings, at least not in the academic sense, because there weren't any March base dates to begin with. But it didn't provide a long-term solution either. For it stands to reason that if labor costs are allowed in determining price, this formula—if employed year after year—would result in progressively higher prices. Wages, not under any lid, would fire the skyrocket. Ditto farm prices.

So the next time the problem of seasonal clothes came up, OPA decided to put the brake halfway on labor, and all the way on prices. By implication, the "squeeze" could be removed by cutting on workmanship and quality.

• **Pretty Complicated**—This order, governing new women's and children's fall-winter outerwear, is one of the most complicated regulations OPA has ever issued. It stipulates that wholesalers and retailers must set their ceiling prices as follows:

- (1) Use last season's price lines when costs correspond to last season.
- (2) Where last year's price lines can't be used, take the average initial dollar markup used last season on the next



CONSTRUCTION RUSHED

Even while construction men lay concrete and place steel beams to rush completion of a plant expansion pro-

gram at the N. A. Woodworth Co., Ferndale, Mich., war workers are turning out essential airplane parts. As fast as concrete is laid, production machinery is moved and set to work.

lowest price line and add it to the cost of the new merchandise.

(3) If there was no next lowest price line, use the percentage markup employed on the next highest price line.

(4) For garments purchased below customary cost, add the same dollar markup as prevailed last season. Finally, "no . . . seller at wholesale or retail [shall] sell or deliver any new line of any women's, girl's, and children's outerwear garments in a price line which is higher than the highest price line at which he delivered garments of the same category during his last selling season."

• **Manufacturers' Ceiling**—As to garment makers, their ceiling is cost plus the average initial percentage margin of the last season. Cost is defined as actual material and trimming cost, or the net price which the seller would have to pay to replace such materials and trimmings after June 14, 1942, whichever is lower. Labor, also an element of cost, must be computed at Mar. 31 wage rates, plus any increases due to irrevocable wage agreements entered into on or before April 27.

Provision is made for pricing new lines, or lines in a price class lower than last year's, but no manufacturer may sell any new lines which differ from or are higher than the price lines of last season.

• **What It Comes Down To**—This tremendously complicated order takes up nine pages of single-spaced typing, but in essence it boils down to this cold fact: no price lines, category by category, may exceed the highest ranges of last year. Yet provision is made for wage and raw-material increases. Ergo, manufacturers and distributors have no alternative but to deal in top-priced merchandise while cutting on quality and workmanship.

All in all, such a solution is a make-shift. It will terminate Dec. 1, 1942, and OPA has already written its own obituary on it. Said Ginsburg to the N.R.D.G.A.: "The pressure to maintain the prices of existing price lines may tend to changes of quality that are not good economy for the shopping public."

• **Canned Vegetables**—The one major instance of OPA's use of the "roll forward" occurred in the case of canned vegetables (BW—May23'42,p13). Because costs had risen considerably since 1941, OPA allowed packers to add 8% to their 1941 prices, plus the actual increase in the cost of raw materials.

But since neither wholesalers nor retailers could reflect this boost, some provision had to be made to move the pack out of the canners' hands. Here the Department of Agriculture came to the rescue, guaranteeing to buy up the food at 92% of each canner's gross ceiling.

• **Pinch Just Beginning**—This, then, is the major pattern of the patchwork that's been put together so far. That it's hardly indicative of a big body of

future solutions is evident from OPA's little hints about "victory" models and the yearning for subsidy money. Furthermore, the problem of the squeeze is now only in its barest initial stage. Wait, say observers, until inventories get low. That's when the squeeze will be felt.

Meantime, OPA hasn't entirely settled the matter of ceiling prices on goods processed from farm commodities, on war procurement orders, and on non-recurring items like construction.

• **Removals and Revisions**—One ceiling blocking a rise in farm prices has so far been removed. This covered prices on canned citrus fruits and juices. In the interim, some ceilings on government-destined merchandise were removed, others revised, and still others boosted upwards to take care of new costs (BW—Jun13'42,p28).

It's Harder to Fly

But chances for getting and using a seat are still fairly good, even under Army's revised airline priority system.

Army's revised airline priority procedure, effective June 20, means that if you're in one of three preference classes and need to fly on war business you can get a rating. If not, you can try to get a seat as you always did and your chances are still pretty good.

The three preference classes are: (1) White House people and those on Army, Navy and Cabinet missions; (2) Army, Navy, Marine Ferry Command pilots; (3) U. S. Services personnel and civilians whose air travel is essential. A fourth class is military goods ordered moved by air.

• **How to Get a Ticket**—If you are in one of the three preference groups, simply present evidence to that effect to your airline office. You will find

yourself in the hands of an agent of the American Air Transport Assn. (He's probably also an employee of one of the airlines.) If the A.T.A. man is convinced of your rights, he will tell the airline to sell you a ticket.

If, for example, you get a rating in Group 3—which includes business men—you may still be rooted out by Group 1 or 2 men, either before you start or at any point on your trip. But this is quite unlikely.

• **Probable Odds**—If you have only the claims of John Citizen, you may ask for and get a reservation, as always, and it's approximately ten to one that you will get where you're going. The odds will tend to shift against you as the weeks pass, but general pessimism about the chances will operate in your favor. It's always worth a trial. Your best bets are trips that leave at inconvenient hours.

The War Department has transferred its airline priority authority to the Air Division, which is part of the Transportation Service of the Services of Supply. SOS, you may recall, is one of the three grand divisions of the new Army, along with the Air Force and Ground Forces.

• **Where A.T.A. Comes In**—Headed by veteran United Air Lines traffic manager Ray Ireland, the Air Division sets up the priority on persons and goods, which will change from time to time. On that basis, the Military Director of Civil Aviation, General Donald Connolly (Army's watchdog on civil air facilities) issues directives to the Air Transport Assn. A.T.A. is in the deal because the individual airlines haven't the heart to turn down their good old customers face to face.

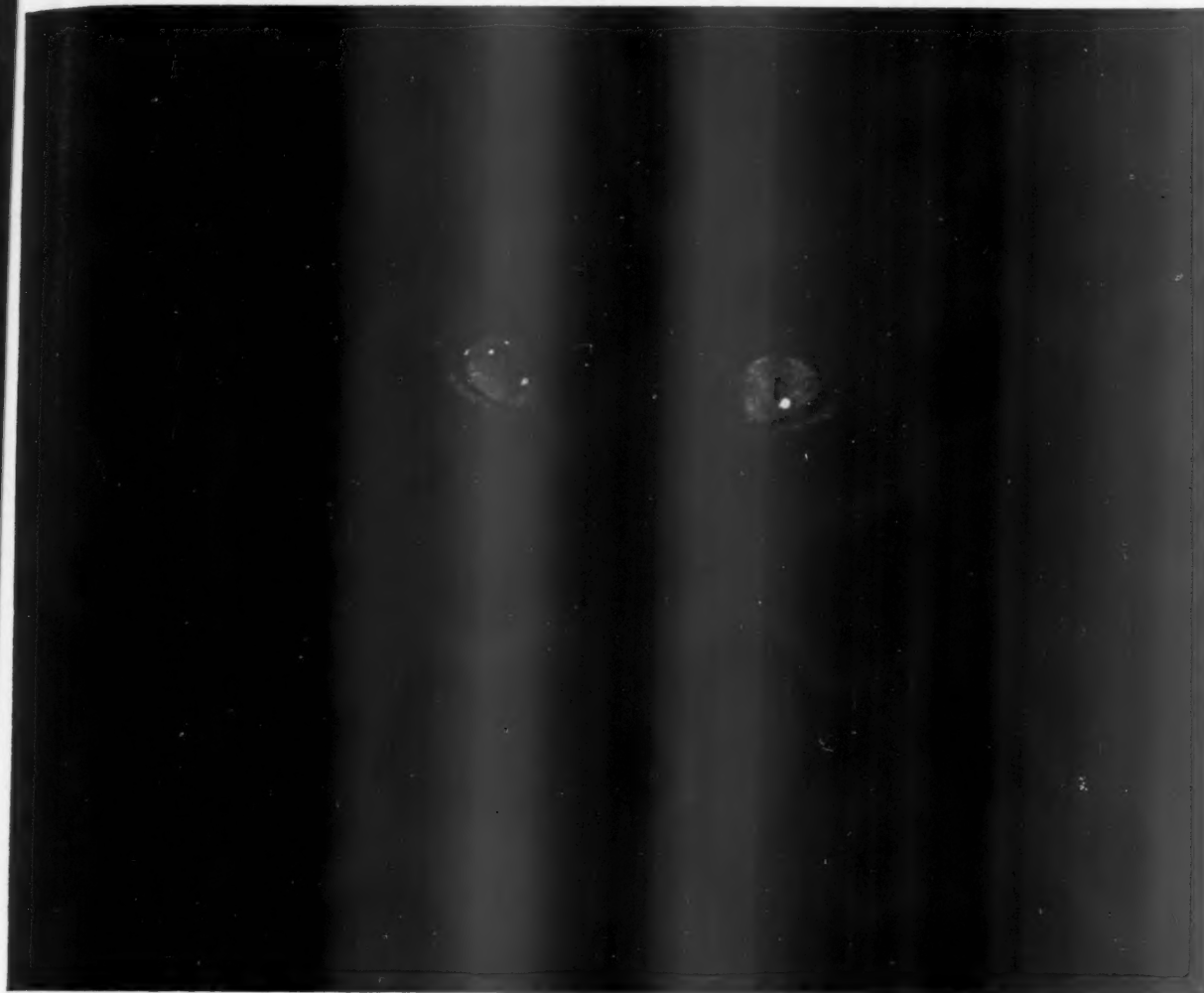
About half of the airlines' planes, around 170, are still operating in the public service, on much-reduced route mileage and curtailed schedules. They are carrying unprecedently high load factors, something over 90%, which means that people are being turned away.

What's Happening to the Cost of Living

	Food	Clothing	Rent	Fuel, Ice, & Electricity	House Furnishings	Misc.	Total Cost of Living
August 15, 1939...	93.5	100.3	104.3	97.5	100.6	100.4	98.6
May 15, 1941...	102.1	102.8	105.7	101.1	103.2	102.5	102.9
June 15	105.9	103.3	105.8	101.4	105.3	103.3	104.6
July 15	106.7	104.8	106.1	102.3	107.4	103.7	105.3
August 15	108.0	106.9	106.3	103.2	108.9	104.0	106.2
September 15 ...	110.8	110.8	106.8	103.7	112.0	105.0	108.1
October 15	111.6	112.6	107.5	104.0	114.4	106.9	109.3
November 15 ...	113.1	113.8	107.8	104.0	115.6	107.4	110.5
December 15 ...	113.1	114.8	108.2	104.1	116.8	107.7	110.5
January 15, 1942.	116.2	116.1	108.4	104.3	118.2	108.5	112.0
February 15	116.8	119.0	108.6	104.4	119.7	109.4	112.9
March 15	118.6	123.6	108.9	104.5	121.2	110.1	114.3
April 15	119.6	126.9	109.1	104.2	121.6	110.6	115.1
May 15	121.6	126.5	109.7	104.7	121.5	111.0	116.0
June 2	122.0	125.9	108.4	104.8	121.1	111.0	115.9

Data: U. S. Bureau of Labor Statistics; 1935=100.

"Unforeseen events... need not change and shape the course of man's affairs"



WHAT HAPPENS IN A BLACKOUT?

Cats and thieves have one thing in common: darkness sets them prowling.

A blackout gives a burglar or robber the fullest advantage over his victims.

He needs but a few minutes to ransack a home for jewelry, silverware or clothes—or to snatch valuable property or merchandise from a commercial establishment. And in these times,

the loss is more serious, due to constantly increasing replacement costs.

No one need be without protection...in the form of burglary insurance.

This protection...for residences, mercantile or manufacturing concerns...may be had without delay from any Maryland agent or broker. Maryland Casualty Company, Baltimore.

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Practically every form of Casualty Insurance and Surety Bond, for business, industry and the home, through 10,000 agents and brokers.



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HAVE KEPT GOODS MOVING FOR 11
YEARS ON NEW YORK CITY'S PIERS.



Every day, hundreds of carloads of perishable fruit, dairy products and other goods are brought in from the West to New York City's piers. To move this valuable merchandise quickly to metropolitan markets, more than 1000 *American Pressed-Steel Hand Trucks* are in service 20 to 22 hours daily.

These "Americans" have certainly proved their durability . . . and have paid for themselves many times over. They have been on the job on the New York piers for 11-15 years . . . with negligible repairs! Truckers for one large company, using 400 of these rugged *Pressed-Steel Hand Trucks*, say that they prefer "Americans" because they handle loads of 600-700 pounds easily, with practically no down time!

Excellent record? Yes, but it's not unusual for *American Pressed-Steel Hand Trucks*. They've proved themselves "tops" for cutting handling costs in many industries. Write us today for Catalog T-41, showing models for every type of service.

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Big Push on Scrap

Trade associations join forces on \$2,000,000 general salvage and \$500,000 fats and oils drives. Use paid ads.

During the next couple of weeks, three mighty salvage campaigns will pump rubber, ferrous and nonferrous metals, and fats and oils into a huge reservoir for reclamation. Because domestic and foreign extractive industries no longer are able to meet demand, the government is going to do some "mining above the ground" in the nation's kitchens, attics, cellars. One significant angle of these campaigns is the contribution of money, manpower, and initiative which private industry makes.

Two campaigns classify almost wholly as industry's own. These are the general salvage venture, underwritten by the American Iron and Steel Institute, and a special fats-and-oils drive sponsored by the Glycerine and Associated Industries. Although the third campaign—the salvage of rubber, which already is in progress—was primarily cranked up by the President, it also has some cooperative angles. The Petroleum Industry War Council is handling all the mechanics, though the raising of huge sums for advertising isn't as big a consideration as in the other two campaigns.

• **Putting a Drive Together**—The making of an industry-sponsored salvage drive is as complicated and delicate as putting together a watch. It generally begins from several directions and achieves unity only after it's reasonably sure that nobody will try to steal the limelight. One important fountainhead for such campaigns is the Advertising Council (BW—Feb. 21 '42, p48). This cooperative venture, operating on a \$100,000 fund supplied by advertisers, agencies, and media, offers its advisory services whenever the government wants to focus public attention on some pressing problem.

• **How It's Done**—Let's say the government wants to salvage scrap metal.

As step No. 1 the Bureau of Industrial Conservation gets up the preliminary statistics, starts thinking about ways and means of enlisting the public. At this point the Advertising Council enters the picture. It finds out what should be done, when, and where. In turn, the council farms the boiled-down problem out to an advertising agency, or group of agency men, who write the ads, radio copy, slogans, and other promotional material (without pay, incidentally). This coordinated material is then presented to the Bureau of Industrial Conservation and the Office for Emergency Management for an O.K.

Now comes the problem of getting a

sponsor to put up the funds. Often a single manufacturer would qualify financially, but he might lack the field force to supervise collection mechanics. So far trade associations have filled the bill splendidly.

• **Like a Regular Campaign**—Once a trade association has undertaken sponsorship and has pledged for the necessary funds, it picks an advertising agency to place the copy. The Advertising Council stays out of this transaction entirely—it's strictly up to the trade association to choose its own service, with the exception that the agency which wrote the original ads gratis for the Bureau of Industrial Conservation may not handle the account.

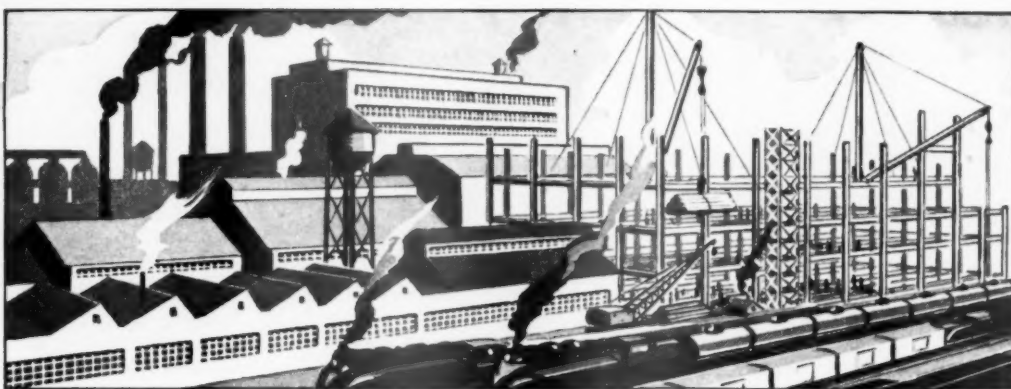
In the case of the general salvage campaign, which starts this month, the advertising bill will come to around \$2,000,000. Roger W. Wolcott, president of the Lukens Steel Co. and chairman of American Iron and Steel Institute's scrap committee, is sparking the drive, while McCann-Erickson is handling the advertising. Daily and weekly newspapers, radio stations, magazines, farm papers, and trade papers will be used. All get their allotments on the same competitive basis that characterizes a peacetime advertising campaign.

• **Getting Help**—Typically, the institute has enlisted another industry group to help with the work. Its helper will be the Automotive Safety Foundation (representing the auto, rubber, and gasoline industries). A.S.F.'s rôle is that of pepper-upper. Field representatives employed by A.S.F. members will contact the 12,000 local salvage committees throughout the nation.

Iron, steel, non-ferrous metals, tin cans, cooking fat, and rubber are the objects of the institute's salvage drive. Junk dealers (and in the case of fat, meat dealers) are the funnel into which these materials will be pumped for distribution back through the regular channels.

• **Half Million for Fats**—Before this venture is launched, however, the fats and greases campaign, piloted by the Glycerine and Associated Industries, will already be under way. Roscoe C. Edlund, chief officer of the trade association, was largely responsible for this undertaking, while Kenyon & Eckhardt will place the advertising. Some \$500,000 will be spent in educating the housewife to save fats and greases.

Like the Iron and Steel Institute, the Glycerine and Associated Industries have a sidekick in the form of another trade association. This is American Meat Institute, boasting 25,000 packinghouse salesmen who will spread the gospel to butchers, urging them to buy all the fats and greases they can lay hands on for resale to reclaiming depots. Further cooperation in this direction is also coming from the Assn. of American Producers of Domestic Inedible Fats and the rendering industries.



SPEED AND CONVERSION *are at work today*

You have probably wondered just what damage a bomb would do to your plant. But do you realize what damage *speed and conversion* may be doing *right now*?

When *speed and conversion* dominate the scene, strange things happen. Machines are converted to new uses; they are over-worked; bearings burn out; accidents occur. Routine is upset, factory house-keeping suffers, and the hazards increase. New processes bring new risks of damage to men and machinery. Thousands of inexperienced workers tackle new jobs, increasing the hazards in respect to workmen's compensation and public liability. Pension and group insurance programs may present new problems and require fresh review. In fact, almost every industrial operation or property needs its insurance protection reviewed, so that where nec-

essary it may be strengthened or revised.

To meet this situation, engage a competent brokerage organization. They will supervise your entire insurance program—from initial study and the negotiation of contracts to the collection of claims—and let you get on with your job as a businessman. Their compensation is not an extra fee from you, but a brokerage paid by the insurance companies.

Johnson & Higgins have been in business nearly 100 years, and are fully staffed for every type and phase of business insurance. They serve many substantial firms and corporations as insurance buyers and advisers, and would be glad to render you the same service.

* * *

In insurance brokerage—it costs no more to have the best.

JOHNSON & HIGGINS

Established 1845

INSURANCE BROKERS

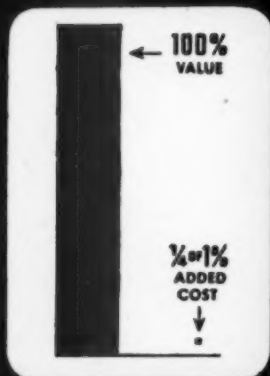
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Buyers of Insurance for Commerce and Industry

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SO MUCH FOR SO LITTLE



The most durable L. L. Brown ledger, instead of ordinary paper, increases accounting costs only 1/4 of 1%, yet guarantees 100% protection—almost resistance to wear. Your printer will be glad to furnish you with L. L. Brown papers.

L. L. BROWN LEDGER Paper

MILLS AT ADAMS, MASS.

ESTABLISHED 1849

L. L. BROWN'S LINEN LEDGER

100% New, White, Linen & Cotton Fiber

ADVANCE LINEN LEDGER

100% New, White, Cotton Fiber

FORWARD LINEN LEDGER

100% New, Cotton Fiber

L. L. BROWN'S FINE

85% New, Cotton Fiber

GREYLOCK LINEN LEDGER

85% New, Cotton Fiber

ESCORT LEDGER & MACHINE POSTING

100% New, Cotton Fiber



WAR BUSINESS CHECKLIST

Washington's Significant Orders on Materials and Prices

• **Allocations**—Ethyl cellulose was placed under complete allocation control, effective June 18, by General Preference Order M-175. No deliveries may be made, except by specific authorization of the Director of Industry Operations, for amounts over 50 lbs.

Pyrethrum, an insecticide, was placed under complete allocation and use control, effective June 13, by General Preference Order M-179.

• **Quinine**—Effective June 19, amendment of Conservation Order M-131 revokes exemption of quinine or totaquine stocks of less than 50 oz. from sales restrictions. A new order, M-131-a, prohibits sale of any amount of cinchona or cinchonidine for other than antimalarial purposes, or sale of quinidine except for antimalarial purposes or treatment of cardiac disorders.

• **Cadmium**—Use is restricted to essential military and civilian uses by amendment to General Preference Order M-65, effective June 24.

• **Copper**—Copper Conservation Order M-9-c has been interpreted to prohibit use of copper and copper alloys in manufacture of pipes and fittings for use in water systems, except corporation cocks and curb stops.

• **Exhaust Valves**—Rigid specifications for the manufacture of valves used in all types of automotive equipment have been prescribed by Limitation Order L-128, effective July 1.

• **Gages**—Distribution of gages, precision measuring tubes, testing instruments and chucks is limited to sales on a rating of A-10 or higher under General Preference Order E-5, effective June 15.

• **Water Meters**—Use of critical metals in their manufacture is sharply restricted by Limitation Order L-154, effective June 18.

• **Space-Heating Equipment**—Shipment of certain types is limited by L-107 to orders of the Army, Navy, Maritime Commission, and Coast Guard, replacing a telegraphic freeze order of Mar. 24.

• **Alloy Steel Scrap**—Mandatory segregation by designated classifications is required by order M-24-c, issued June 17.

• **Rubber**—Imports of rubber and rubber products (including balata) except by subsidiaries of the RFC were prohibited effective June 19 by amendment No. 10 to Supplementary Order M-15-b.

Limitation Order L-114 on safety equipment was amended June 17 to permit use of rubber for purposes detailed by M-15-b.

Use of elastic fabrics in sanitary goods was restricted June 18 by Limitation Order L-137, but use of additional elastic fabric in surgical type corsets is permitted by Amendment No. 1 to Limitation Order L-90.

• **Railway Maintenance**—By Amendment No. 1 to P-88, the preference rating has been raised to A-1-j from A-3 on deliveries of materials for repair and maintenance of track, structures, signal and com-

munication systems, cars and locomotives, and other operating equipment.

• **Track-Laying Tractors**—Distribution of any new tractor or new auxiliary equipment is prohibited by Amendment No. 1 to Limitation Order L-53, regardless of any preference rating, except upon a specific release issued prior to June 15, or upon specific authorization.

• **Lumber**—A reduction in number of sizes of moisture-resistant Douglas fir plywoods from about 4,300 to 300 is effected by Limitation Order L-150. Delivery is permitted for work which will be completed by July 1.

Mahogany 1/28 in. veneers are not subject to the sales restrictions of Conservation Order M-122.

• **Fluorescent**—Fixtures using tubes rated at 30 watts or less have been released from the sales restrictions of Order L-78.

• **Baby Carriages**—Continued production is permitted by Order L-152 provided that they contain none of the more critical materials and a minimum of iron or steel after July 31.

• **Church Goods**—Use of critical material is curtailed by general Limitation Order L-136, effective June 23.

• **Cans**—Manufacturers are required by Conservation Order M-81-a to substitute wherever possible electrolytic tinplate and chemically treated blackplate for tinplate. To the extent of such substitutions, the tinplate or terneplate quotas assigned by order M-81 are reduced.

• **Honey**—Several million pounds are made available as a sugar substitute in bakery goods, ice cream, candy, soft drinks, and other foods by amendment to General Preference Order M-118, issued June 18.

• **Shoe Repair**—By Amendment No. 1 to General Preference Order M-80, shops may use up frozen stocks of heavy shoe sole leather and may buy additional supplies of similar quality which dealers had on hand on May 22.

• **Price Control**—Prices of woolen and worsted fabrics for men's and women's suits and overcoats are lowered at the manufacturing and jobbing levels by Maximum Price Regulation 163 prescribing a special seasonal pricing formula, effective June 22.

Ceiling prices for red cedar shingles have been established by Maximum Price Regulation 164, effective June 29, on shipments originating at mills.

• **Synthetic Rubber**—To stimulate production, price ceilings on synthetic rubber, aviation gasoline, toluene, and materials essential to their manufacture have been removed by Amendment No. 7 to Supplementary Regulation No. 1 and by Amendment No. 18 to Revised Price Schedule 88, effective June 13.

• **Leaded Zinc Oxides**—Maximum price for those containing 35% or more lead, which was reduced 4¢ per lb. by the General Maximum Price Regulation, has been allowed to return to the Apr. 1 level of 7¢.

PUT THE HEAT ON TOKYO

WITH
TOCCO



A STANDARD UNIT. TOCCO can be adapted to post-war jobs by simply changing the work fixture. Application shown is brazing of shell adapters.

• Pearl Harbor—Manila—Wake—Singapore—Java—Bataan—Corregidor—Burma!

Are you using all your ingenuity and resources to turn this tide?

Are you using advancements such as Speedy TOCCO to multiply output of armament so that our boys can really put the heat on Tokyo and all Axisland?

Standard TOCCO Induction Heat Treating equipment is speeding production of the war material listed here. Other applications are being developed daily.

Consult us today on these or the many other applications of TOCCO Induction Heat Treating.

TOCCO Induction Heat Treating Speeds Production of . . .

HARDENED

Crankshafts
Camshafts
Armor Piercing Shot
Tank Sprockets
Track Pins
Grouser Shoes
Propeller Hubs
Bar Stock

ANNEALED

Cartridge Cases
Aviation Tubing

BRAZED

Shell Adapters
Incendiary Bombs
Bursting Tubes
Fuse Seat Liners
Mortar Shells

HEATED and formed

Cartridge Cases
Shells
Bombs
Gun Barrels
Propeller Hubs
Aircraft Screws

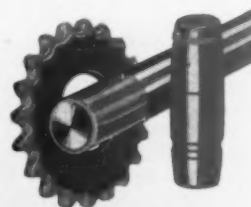
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Cleveland, Ohio



TOCCO

World's Fastest, Most Accurate Heat-Treating Process

SPEEDY ELECTRIC HEAT IS GENERATED WITHIN
THE SECTION TO BE HEAT-TREATED





Jim Eaton's speedboat is out hunting Japs . . .

She was a sleek mahogany runabout when she stole Jim Eaton's heart at the last motor boat show. But since then she has put on weight and been painted battleship gray. She is in the Navy now, patrolling a stretch of bay along the Pacific coast—part of an enormous fleet of patrol and picket boats, mine yawls and mosquito boats to which our builders of pleasure craft have turned their world-famous genius and facilities.

American builders of power boats know the meaning and methods of mass production. When they changed from yachts and runabouts to war craft the result was, not a trickle, but a swelling stream of boats for the Army, Navy and Marines.

When problems arose they were

chiefly in adapting production methods to the new designs and special alloys required by war. In cooperation with Revere Technical Advisory staff, many famous boat builders made the change-over as smoothly as they would in producing a new model. For in addition to sound copper alloys, Revere supplies this service to help make manufacturing operations easier and quicker.

Every ounce of copper our country can produce goes directly into vital war materials. Fortunately, Revere is equipped with new plants, improved machines, advanced processes which add enormously to the nation's capacity to produce fine copper alloys. Not only are these plants working to the limit of their resources, but more facilities are steadily being added to bring the day of victory still nearer.



The Revere Technical Advisory Service functions in (1) developing new and better Revere materials to meet active or anticipated demands; (2) supplying specific and detailed knowledge of the properties of engineering and construction materials; (3) continuously observing developments of science and engineering for their utilization in producing methods and equipment; (4) helping industrial executives make use of data thus developed. This service is available to you, free.

REVERE COPPER AND BRASS INCORPORATED

EXECUTIVE OFFICES: 230 PARK AVENUE, NEW YORK



**BUSINESS WEEK PRESENTS
FOR EXECUTIVES**

A GUIDEBOOK TO WAR BUSINESS

There is no royal road to a war contract, no sure and certain highway which can be guaranteed to lead to Army or Navy business. Admittedly, some contractors get there by using shortcuts; most of them, however, make the grade by following the route that Washington has staked out for them. This Report to Executives is intended to serve as a road map delineating that route; additionally, it may be considered a book of driving instructions—a summary of the policies which contractors and subcontractors have found it prudent to follow. Like the preceding report, "A Guidebook to Defense," which Business Week issued Mar. 15, 1941, this report has been prepared in response to a demand expressed by both parties to potential war contracts—manufacturers and government officials, who are eager to enlist America's full productive capacity in the job of arming the United Nations. There is one big difference between the earlier Guidebook and this one. In the intervening 15 months, the war effort has shaken down, the dimensions of the armament program have been finally set. As a consequence, the techniques by which Washington expects to get the job done have taken on a much greater measure of permanence—permanent, at least, for the duration. There will be procedural changes—in the application of labor priorities, for example—but in essence the route to war contracts has been fixed and marked.

THIS IS ONE OF A SERIES OF SPECIAL REPORTS TO EXECUTIVES ON CURRENT OPPORTUNITIES, PROBLEMS, AND TRENDS OF MAJOR SIGNIFICANCE TO BUSINESS

Covered under the general copyright on the June 27, 1942, issue of Business Week.

A GUIDEBOOK TO WAR BUSINESS

I. GETTING STARTED

Today, for the first time in two years, you can see the pattern of the world in which you are going to have to live and do business until the war is over. In broad outline at least, the full dimensions of the war production job are now realized, and the framework of controls by which the production machine is governed has been set.

Ever since June, 1940, war has had its effects in a series of shocks and policy switches. Every time industry and government have adjusted themselves to an armament program of so many billions, the bogie has been doubled or tripled. Now, in mid-1942, we know that the over-all schedules won't be doubled again; we know it because we know that the present schedules will use up all the materials and most of the manpower there is in the country.

Because the production goals have kept changing, programs for the regulation of industry, for the past two years, have always been geared for a smaller program than the one they were actually dealing with. Until the last month or so, priorities officials, for instance, have in effect been attaching red rush stickers to war orders at a time when whole industries and the entire supply of certain materials, were being devoted to war work.

But this situation, too, is different now. Of the three elements which have to be controlled in a planned economy—capital (money and plant), materials, and manpower—the first two are now regulated for total war. Regulation of manpower is just getting started.

The general framework of these regulatory systems will be outlined later. The first problem is how you, as a business man, can stay in business through the war.

Civilian or War Business?

Fundamentally, you have three choices. You can find yourself a business where you don't need any metal, rubber, plastics, chemicals, or highly skilled manpower. Do that and you can probably survive despite substantial disruptions. And you won't have any selling worries; there'll be a market for almost anything you can supply.

Alternatively, you can find yourself a place among the businesses supplying basic necessities of civilian life—food, clothing, fuel, transportation—lines that just have to be kept going somehow. The more basic the better; you're safer making overalls than play suits. You can do pretty well, but you'll always be dodging disaster.

Your safest course, however, is to get war production work. If you already have a war contract, skip to Section III. If not, you may find what follows helpful.

There's no simple formula for getting war work. Obviously, not everyone can get it. The newspaper stories about the fellow who is turning out war goods with a lathe in his cellar are heartening, and there have been a

few such cases. But, in the main, unless you have some sort of a functioning plant, you'll just be breaking your heart and wasting your money if you look for a contract.

Finding war business is pretty much like finding any other kind of business. It's a matter of scratching for it by the ordinary techniques of selling—finding someone who wants a job done and convincing him you can do it.

There are two obvious preliminary steps: (1) Get together a presentable and complete survey of your manufacturing facilities, and (2) get a preliminary idea of what war goods you are capable of manufacturing. Keep an open mind on this latter point. You may end up with a contract for something unexpected.

Drafting the Presentation

Your plant survey should include a description of your normal peacetime product and any war production you have done. Your business experience and a list of past and present customers should go in. You should list important managerial and technical personnel with their experience. Include a financial statement.

Description of your plant facilities should be very complete. Show location, transportation, available power and water, and the like. Include complete layout plans and photographs of each section of the plant. List all machine tools and machinery as to type, make, size, age, serial number, and tolerances usually worked to.

Describe your labor situation also. Show the number of your factory employees and their skills. Estimate what your peak employment would be on one, two, and three shifts. Analyze the available labor and local wage rates.

Then have someone who knows how put the survey into clear, readable form.

If you're vague as to what military requirements your plant might fit, you'll find useful samples of war goods on display at field offices of WPB's Bureau of Contract Distribution (page 34). Some of these exhibits are good and complete, others pretty scrappy. Most Army procurement field offices (page 30) maintain displays of the sort of goods they purchase.

At Contract Distribution field offices in the larger cities you'll find quite competent engineering staffs, men who can look over the description of your plant and advise as to what war goods you're best adapted to manufacture.

The two biggest sources of war work are prime contracts with federal war agencies and subcontracts obtained from firms holding prime contracts.

If your firm is a substantial, well-financed organization, if you have a technical and supervisory staff capable of following through on complete production of goods to rigid specifications, if you're not afraid of paperwork, you can consider going after a prime contract.

Smaller, less well-equipped firms will do better to go

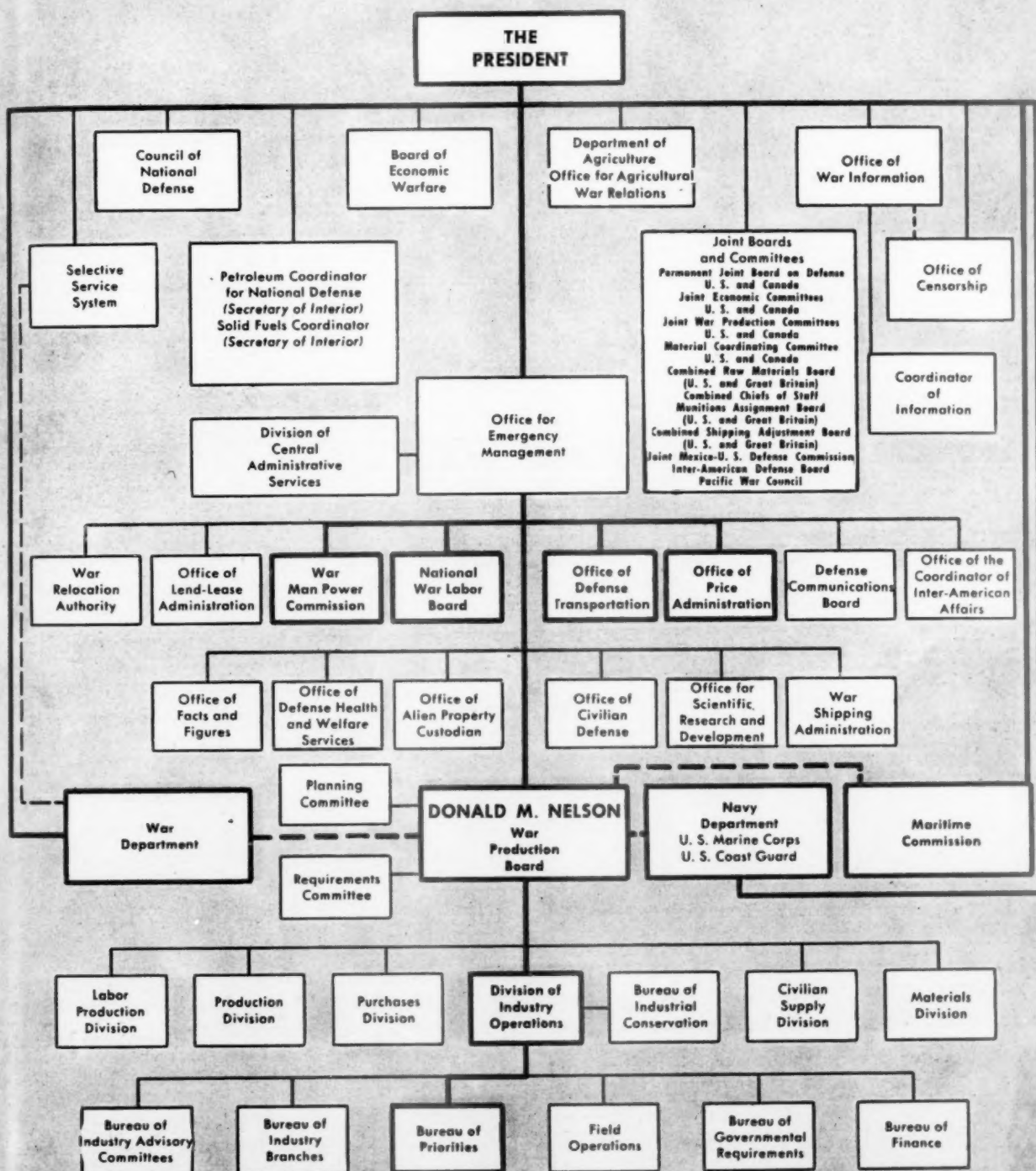
WHO RUNS THE WAR EFFORT

Modern war affects nearly every phase of a nation's life, and in the two years since the defense program started, a multitude of agencies have been born (and many have since died) to administer different parts of the war job. By and large, new agencies have been set up, attached to the executive office of the President, leaving to the old-line government agencies the peacetime functions of the government—modified, of course, by war conditions. Big exception is RFC, which does an important war-financing job through its subsidiary

corporations—Defense Plant, Defense Supplies, Metals Reserve, Rubber Reserve.

Most of the new agencies have been gathered under the Office for Emergency Management. OEM, however, is a mere administrative holding company.

The average businessman is not much concerned with most of these groups. He should be familiar with the contract-letting outfits—War, Navy, Maritime Commission—and the major regulatory agencies—WPB, OPA, ODT, NWLB, and WMC.



after a subcontract. Don't forget that three-fourths of the contracts have gone to a hundred firms; there's an immense volume of subcontracts being placed. Working on a subcontract, you'll be doing business in ways you're more accustomed to. Moreover, you'll get the benefit of the technical savvy of big outfits which have been doing the work for some time.

II. GETTING A PRIME CONTRACT

Perhaps your decision is to go after a prime contract. Don't underestimate the job. You are a latecomer. By and large the armament program has jelled; the services have located most of their sources of supply, are not as hot after new contractors as they were a year ago. In 1941, the big need was to find or build more and more plant to turn out munitions. By now enough plants have been lined up to process just about all the raw material that can be fed to them, to employ just about all the men the Army can spare. When you start looking for a contract these days you are bumping into those who got in on the ground floor.

This doesn't mean that there aren't contracts to be had. It does mean you will have to scurry around to find them, that you will have to work just as hard to get a government job as you ever did to get commercial business.

Government work has come more closely to resemble commercial business in another respect, too. The rigid formula of competitive bidding—hallmark of the public contract—has just about disappeared. At Donald Nelson's express order, negotiation has become the standard way of awarding contracts.

Negotiation can mean a variety of things. In some cases, particularly when buying specialized combat equipment, the procurement office calls in a few firms that look

suitable, thrashes it out with them, and arrives at terms and price. Again, invitations may go out to a broad list of firms, asking them to submit informal quotations. These quotations then become the basis for discussion.

In buying commercial and semicommercial items, nearly all the forms of competitive bidding are preserved. The information that quotations are wanted is spread broadcast, and bids are submitted in much the usual way. However, award to the lowest responsible bidder is not a matter of course. Many other factors enter, particularly speed of delivery. Awards may be made to several firms at different prices. There may be a certain amount of dickering over the quotation submitted.

What it all adds up to is that there is salesmanship involved in selling to the government as well as in selling to a private buyer. You've got to convince the procurement officers that you have the facilities and the skill to do the job they want and to do it fast. You've got to make yourself known to the men who buy whatever item it is you think you can make so that you will get consideration when contracts are up.

Don't count heavily on getting any job that will require facilities beyond what you now have. There's no absolute rule on it, but the services now feel themselves in a position to pick and choose, want to hold additions to plant to a minimum. If you lack certain machines you'll be on much sounder ground if you line up someone who has the machines to go in with you on a subcontract basis. If you lack a good deal of the needed equipment, consider again the possibility of taking a subcontract for the part of the work that your present equipment can handle.

If you still think a prime contract is the thing, your first step is to determine which agency or agencies buy the goods you are prepared to make. Check the product lists on page 30. If you are uncertain, consult with your bank



WPB's Contract Distribution Division in Milwaukee has set up a shopping center for subcontractors. Prime contractors display parts they need; these are grouped by types of machines required for their manufacture. By con-

sulting the front office directory, would-be subcontractors know where to find forgings or in what booth stampings are grouped; coded tags identify prime contractors. So far, \$3,000,000 of contracts have been closed.

or the nearest local office of the Contract Distribution Bureau of WPB. Then get in touch with one of the field offices of that agency. There are a few exceptions, but most Army buying is now done through field offices, except on the largest contracts.

Some field offices specialize in particular goods. Army shoes, for instance, are bought at the Boston Quartermaster Depot. A situation of this kind may dictate which field office you should approach. Otherwise go to the nearest office.

Your job at this point will be to convince the procurement officers that you are a good potential source of military supplies. Each agency has its own system for qualifying potential contractors, but for any agency you should be prepared to present a detailed listing of your facilities, manpower, raw materials, transportation, and the like, as well as information covering your firm's experience and the sort of work you are accustomed to doing.

Setting the Price

In the award of a war contract, price is a controlling but not sole determining factor. Basic approach is that a contractor is picked, in the first instance, with little regard to the price at which he offers to do the job. The speed with which he can do an effective job of meeting the specifications is important. To a lesser degree other elements enter—location, labor availability, conservation of transportation, and availability of raw materials.

However, once you have been chosen as the man to do the job, they'll start talking price—but tough! If your proposed price looks out of line with the previous experience of the contracting officer or with the informal quotations submitted by other firms seeking the same job, you'll be under pressure to accept a lower price. And after you go into production on a contract, your price will still be under scrutiny. If your actual costs prove to be lower than anticipated, the contract will be renegotiated.

Normally this will mean that deliveries made under the contract subsequent to renegotiation are at a lower price. If—accidentally or intentionally—you have collected excessive profits, you will be asked to make a refund. Strictly, you could stand on your contract, of course. But you won't. There are too many ways life can be made unpleasant for you.

The War Department recently stopped taking account of cash discounts offered in comparing prices because too often the discounts don't get taken.

Sales to Army, Navy, or other war agencies are subject to the terms of price ceilings established by the Office of Price Administration just as are any other sales. However, exemptions for certain kinds of war business have been written into a good many OPA regulations. If your industry is covered by a specific price regulation, you can assume that sales to the government will be subject to the same rules as are private sales unless specifically excluded.

If you are not covered by a specific regulation, one of two very broad regulations is likely to apply. The General Maximum Price Regulation, by and large, freezes the price of all commodities and services not otherwise covered at the levels of March, 1942. Regulation 136 freezes machinery prices at October, 1941, levels. Both orders

exempt sales of boats, combatant equipment, and explosives or parts of these things. Also exempt are experimental, secret, and emergency maintenance contracts.

Furthermore, OPA and the services are agreed that no price considerations should be allowed to stand in the way of production. Whenever a special situation arises where such interference appears to exist, an application can be submitted to OPA for a change in the price regulation. As soon as the application is submitted, the service and the contractor proceed on the assumption that OPA has acquiesced. If the application is subsequently denied, prices are adjusted and refunds made if necessary.

When, as at present, contracts are mostly negotiated, a policy of renegotiation is almost inevitable. A price is set when a contract is negotiated; it may easily turn out that the price is far out of line, especially if economies of mass production begin to show up.

By mandate, first of the WPB and subsequently of Congress, the Army, Navy, and Maritime Commission now insert in all contracts of more than \$100,000 a clause providing for changing the price if the profit appears to be excessive. The restudy is to be made as soon as production has gone far enough to give a fair indication of costs.

What Are Costs?

No rigid standards have ever been established as to what is an excessive profit—not even as to whether the profit in question should be figured on gross business or on investment. It's simply a matter of the personal judgment, in the first instance, of the procurement officer, and, in the final decision, of Price Adjustment Boards set up in Army, Navy, and Maritime, aided by the Cost Analysis Section of WPB.

Objective is to avoid profits which will be far out of line with either capital or gross business. Considerable weight is given to the profit levels prevailing in similar firms; some attention is even paid to such moralistic factors as whether the firm in question got into war production early and willingly or what it has contributed to the war effort.

In fixed fee contracts, no cost is allowed for bonuses. Costs allowed for advertising are subject to individual determination in each contract, with peacetime expenditures taken as a standard. Sudden increases are likely to invite investigation.

On the related question of distinguishing between cost items and profit items, the services are guided by a comprehensive regulation drawn up by the Treasury two years ago. Incorporated in a document, TD-5,000, this regulation deals with such questions as what selling expenses may be charged as costs. You should familiarize yourself with it. An explanation of TD-5,000, as interpreted by Army and Navy auditors, is available from the Superintendent of Documents in Washington under the title, "Explanation of Principles for Determination of Costs under Government Contracts." It costs 10¢.

If you are not a metal-working manufacturer, you're likely to find that the Army Quartermaster Corps is your dish. QMC is the big buyer of noncombat equipment, the multitude of housekeeping items needed to keep four to eight million men alive and reasonably comfortable.

Many of its purchases are likely to be quite similar to ordinary commercial items, though usually having rather more rigid specifications.

Like nearly all Army procurement, QMC buying is handled through field offices. It differs, however, in that the field offices are specialized by type of purchase. If you want to sell clothing, for instance, you deal with the Philadelphia QM Depot, no matter where your plant is located. See the table of field offices below.

QMC buying procedure more closely resembles peacetime competitive bidding than does that of other branches. That is, instead of negotiating with one or two

firms, QMC buyers usually try, when they have a contract to let, to call in all the principal producers of the item.

However, like the other branches, QMC deals only with firms which have pre-qualified themselves. So your first step is to write to or visit the appropriate field office with your plant survey data. If it looks good, an inspector will visit your plant and, if he approves, you will be put on the list for consideration. If you don't, fairly soon thereafter, get an invitation to submit quotations, drop around and remind them you're still alive.

Navy equivalent of the Quartermaster Corps is the Bureau of Supplies and Accounts. S&A procurement,

WHERE, WHAT, AND HOW THE ARMY BUYS—

The Army's actual purchasing operations are specialized and decentralized among the various branches, principally the Quartermaster Corps and the Ordnance Department. For this purpose the several branches maintain depots and arsenals which specialize to a great extent in the articles purchased. Manufacturers who are in production or are capable of producing any item required by the military

should communicate directly with the arsenal or depot responsible for the purchase of that item. Location of the Army's principal depots and arsenals, together with a general list of the articles purchased at each, appears below. (Navy buying is much more centralized; principal agencies are the Bureau of Supplies and Accounts, the Bureau of Yards and Docks, the Bureau of Ordnance, and the Bureau of Ships.)

QUARTERMASTER CORPS

Philadelphia Quartermaster Depot, 21st and Johnson Sts., Philadelphia, Pa.

Textiles, cotton and woolsens; flags, colors, and standards; blankets, mattresses, sheets, pillow cases, and mosquito bars; buttons, badges, insignia, and metals; musical instruments; caps, hats, gloves, and men's furnishings; firemen's rubber clothing; uniforms, overcoats, raincoats, leggings, underwear, socks, and special clothing; bakers' and cooks' clothing; suiting cloth; sweaters; flying cadet clothing; thread; brassards; zippers; sleeping bags; sewing machine work; ribbons, nurses' uniforms; bathrobes; towels; hymnals; pajamas.

Boston Quartermaster Depot, Army Base, Boston, Mass.

Boots and shoes of all kinds; shoe laces and lasts; foot measuring outfits; ski equipment; snow shoes; cleaning and preserving materials; forage; shoe repair supplies and machinery.

Jersey City Quartermaster Depot, 26 Exchange Place, Jersey City, N. J.

Toilet articles; cleaning and preserving materials; laundry supplies and equipment; paper bags and sacks; paper stationery supplies; stencils; toilet paper; wrapping paper; forage; coal; construction materials and equipment.

Jeffersonville Quartermaster Depot, 10th St. and Meigs Ave., Jeffersonville, Ind.

Canvas and tentage; field stoves, ranges, mess tables, stools, and kitchen and bakery equipment; leather harness, saddlery, and pack equipment; animal-drawn vehicles; agricultural implements; industrial equipment; forage, and cleaning and preserving materials; leather treatment; thread; laundry supplies and equipment; goggles; tableware; glassware; chinaware; and kitchenware; haversacks; belts (web, leather); bedding rolls; cutlery, wood tool boxes; sewing machine work; foot tubs; lanterns and accessories; supply and pack artillery chests; miscellaneous hand tools; tool sets; tool kits; commissary rolls; hand carts.

Chicago Quartermaster Depot, 1819 West Pershing Road, Chicago, Illinois

Forage and cleaning and preserving materials; scales for weighing; barrack bedsteads; barrack chairs; canvas and steel cots; field desks; trunk lockers; horse clipping machines, blades and all parts therefor; canvas cot covers; field safes; folding camp tables; laundry supplies and equipment; ski equipment; snow shoes; coal.

Washington Quartermaster Depot, 24th and M Streets, N.W., Washington, D. C.

Incandescent lamps; postal scales; office and

officers' and noncommissioned officers' furniture, filing equipment, rugs; refrigerators; electric and gas ranges; typewriters, adding machines, and office labor-saving devices; blank forms and envelopes; bakery and kitchen equipment; electric lighting fixtures; generators; lockers; laundry supplies and equipment; forage; construction materials and equipment.

Quartermaster Supply Officer, San Francisco General Depot, Fort Mason, San Francisco, Calif.

Alaskan clothing; fresh frozen beef and flour for Hawaiian department; forage; cleaning and preserving materials; sweaters; laundry supplies and equipment; ski equipment; coal.

Holabird Quartermaster Depot, Baltimore, Md.

Motor vehicles, trailers, bicycles; motor vehicle equipment; truck curtains; fire fighting equipment; machine and hand tools; machinery equipment for motor transport shops.

Quartermaster Motor Supply Depot, Fort Wayne, Detroit, Mich.

Motor vehicle parts and equipment.

Other Supplies, Depots

Similar supplies of standard manufacture such as: brooms, brushes, cordage, cotton mops, corrugated cans, cleaning and preserving materials, caustic soda, corrugated shipping containers, candles, calcium hypochlorite, cotton waste, door mats, G. I. buckets, garbage cans, laundry bluing, laundry soap, laundry bags, marking devices, metal polish, milk cans, neetsfoot oil, naphthalene, office paste, pencils, packing and crating materials, paper boxes, rubber stamps, rust preventive compounds, sundry stationery supplies, steel writing pens, safety matches, sealing wax, soap powder, steel wool, sodium hypochlorite, shaving cream, toilet soap, typewriter ribbons, tooth powder, tooth paste, waste paper receptacles, wheelbarrows, wiping materials, wooden boxes, and wash basins; and supplies common to two or more branches of the service, and construction materials and equipment, are purchased at the depots listed above, as well as at the following:

Atlanta Quartermaster Depot, Glenn and Murphy Ave., S. W., Atlanta, Ga.

Seattle Quartermaster Depot, 1519 Alaskan Way South, Seattle, Wash.

Quartermaster Supply Officer, San Antonio General Depot, Fort Sam Houston, Tex. (Also purchases laundry supplies and equipment and coal.)

Kansas City Quartermaster Depot, 5401 Independence Ave., Kansas City, Mo.

New Orleans Quartermaster Depot, Poland and Dauphin Sts., New Orleans, La.

Puerto Rican General Depot, Fort Buchanan, P. R.

Hawaiian Quartermaster Depot, Honolulu, Hawaii.

Quartermaster Section, Panama-Pacific General Depot, Corozal, C. Z.

Quartermaster Section, Panama-Atlantic General Depot, Fort William D. Davis, C. Z.

ORDNANCE DEPARTMENT

The Ordnance Department arsenals and depots listed below are divided into two groups—A and B—for the purpose of classifying the commercial supplies purchased by each of them. Group A has been subdivided into A-1 and A-2 in order that the class of supplies these arsenals are interested in specifically, in addition to the general class of supplies, can be more easily identified.

GROUP A-1

Frankford Arsenal, Philadelphia, Pa.
Picatinny Arsenal, Dover, N. J.

GROUP A-2

Rock Island Arsenal, Rock Island, Ill.
Watertown Arsenal, Watertown, Mass.
Watervliet Arsenal, Watervliet, N. Y.
Springfield Armory, Springfield, Mass.

GROUP B

Aberdeen Proving Grounds, Md.
Augusta Ordnance Depot, Augusta, Ga.
Benicia Ordnance Depot, Benicia, Calif.
Charleston Ordnance Depot, N. Charleston, S. C.
Curtis Bay Ordnance Depot, Curtis Bay, Md.
Delaware Ordnance Depot, Pedricktown, N. J.
Erie Ordnance Depot, LaCarné, Ohio
Hawaii Ordnance Depot, Ft. Shafter, Hawaii
Nansemond Ordnance Depot, Portsmouth, Va.
Ogden Ordnance Depot, Ogden, Utah
Raritan Ordnance Depot, Metuchen, N. J.
San Antonio Ordnance Depot, San Antonio, Tex.
Savanna Ordnance Depot, Savanna, Ill.
Wingate Ordnance Depot, Fort Wingate, N. M.

Supplies and services usually procured by Groups A-1, A-2, and B:

General maintenance supplies; packing and shipping materials—lumber, box shooks, strapping, etc.; electrical supplies—light and power; general construction supplies; automotive equipment and maintenance supplies; paints and oils for ordnance material.

Supplies and services usually procured by Group A-1:

Machines and machine tools—lathes, shapers, grinders, etc.; iron and steel—wire, bars, rods, plates, shapes, forgings, castings; copper brass, and bronze—wire, bars, rods, plates, strips, castings, forgings; aluminum and aluminum alloys, bars, plates, rods, shapes, sheets,

however, is centralized in Washington. Buying practice differs according to the item being bought. On tricky stuff one or two firms are called in to negotiate. In other cases a number of firms are canvassed by telephone or telegraph.

When standard or relatively simple items are bought and time permits, a "Notice of a Navy War Requirement" is circulated to all the suitable firms on the bureau's lists. This is virtually a request for bids. But the award does not automatically go to the low bidder. Time of delivery is the first consideration; no penalty clauses are included in contracts, but a firm which falls down in

time of delivery is unlikely to receive further awards.

Firms which appear suited to difficult and complex work are usually eliminated from consideration on simple items. Preference is given to firms which need no additional plant or machinery to undertake the contract. If these other factors are equal, award is made to the low bidder.

To get on the S&A list of qualified contractors, you should send the survey data on your plant to the Paymaster General of the Navy, Bureau of Supplies and Accounts, Washington.

If you are used to doing heavy work in metal, chances

A DIRECTORY OF ITS PURCHASING AGENCIES

strips, castings; chemical and physical laboratory supplies; industrial chemicals; weighing scales—sensitive balances—and larger; explosives processing equipment; explosives and separate explosive ingredients; cartridge brass; electroplating equipment and supplies; heat-treating furnaces and accessories; gages, dies, etc.; wood-working machinery and supplies; optical instruments and accessories; manufactured metal components; welding equipment and supplies.

Supplies and services usually procured by Group A-2:

Machines and machine tools—lathes, shapers, grinders, etc.; iron and steel—wire, bars, rods, plates, shapes, forgings, castings; copper, brass and bronze—wire, bars, rods, plates, strips, castings, forgings; aluminum and aluminum alloys—bars, plates, rods, shapes, sheets, strips, castings; chemical and physical laboratory supplies; electroplating equipment and supplies; spray-painting equipment and supplies; dies, molds, gages, etc.; heat-treating furnaces and accessories; wood-working machinery and supplies; manufactured metal components; welding equipment and supplies.

AIR CORPS

Contract Section, Air Corps, Wright Field, Dayton, Ohio

Airplanes, airplane parts, equipment, accessories; flying equipment and supplies; lighting and photographic equipment; parachutes; special and technical instruments and equipment; aviation fuel.

CHEMICAL WARFARE SERVICE

Edgewood Arsenal, Edgewood, Md.
Boston C. W. Procurement District, 2000 U. S. Post Office Bldg., Boston, Mass.
New York C. W. Procurement District, 292 Madison Ave., New York City
Pittsburgh C. W. Procurement District, American Bank Building, 6th Ave. and Grant St., Pittsburgh, Pa.
Chicago C. W. Procurement District, 1506 N. Wacker Dr., Chicago, Ill.
San Francisco C. W. Procurement District, Room 201, 1355 Market St., San Francisco, Calif.

Chemicals; ceramics; chemical plant equipment; specially prepared fabrics; duck, felt, cloth, webbing; gas masks and components of fabric, glass, metal, moulded rubber, and plastics; machines and machine tools; activated charcoal.

SIGNAL CORPS

Officer in Charge, Philadelphia Signal Corps Procurement District, Wissick Ave. and Abbottsford Rd., Philadelphia, Pa.

Radio communication equipment; telephone and telegraph equipment; wire and cable; meteorological equipment; signal corps photographic equipment; coding and cipher devices; pigeon equipment.

Officer in Charge, Chicago Signal Corps Procurement District, 1819 West Pershing Road, Chicago, Illinois.

Telephone and telegraph equipment; coding and cipher devices; wire and cable; radio communication equipment.

Officer in Charge, San Francisco Signal Corps Procurement District, Presidio of San Francisco, California.

Small quantities of miscellaneous equip-

ment covering telephone and telegraph; wire and cable; radio communication equipment, and certain pigeon equipment and accessories.

Director, Aircraft Radio Laboratory, Wright Field, Dayton, Ohio.

Special experimental research and development equipment for aircraft communications, and navigational purposes.

Director, Signal Corps Laboratories, Fort Monmouth, Red Bank, New Jersey.

Special communication equipment for motorized and armored forces; parachute, and other special designs of communication equipment; fire control and ground radio communication equipment; experimental research and development equipment for communication purposes.

Officer in Charge, Signal Corps Photographic Laboratory, Army War College, Washington, D. C.

Photographic equipment.
Signal Corps supplies and equipment of a nature similar to that listed above are purchased to a limited extent by the following agencies:

Address mail to:
The Chief Signal Officer
Munitions Building, Washington, D. C.

Address mail to: The Signal Officer
First Corps Area, Army Base, Boston, Mass.
Second Corps Area, Governor's Island, New York

Third Corps Area, U. S. Post Office Bldg. and Court House, Baltimore, Md.
Fourth Corps Area, Post Office Bldg., Atlanta, Georgia

Fifth Corps Area, Fort Haynes, Columbus, Ohio
Sixth Corps Area, U. S. Post Office Bldg., Chicago, Ill.

Seventh Corps Area, Federal Bldg., 15th and Dodge Streets, Omaha, Neb.
Eighth Corps Area, Fort Sam Houston, San Antonio, Texas

Ninth Corps Area, Presidio of San Francisco, California

Address mail to: The Department Signal Officer

Hawaiian Department, Fort Shafter, Hawaii
Panama Canal Department, Quarry Heights, Canal Zone
Puerto Rican Department, San Juan, Puerto Rico

Address mail to: The Commanding Officer
Hawaiian Signal Depot, Signal Corps Area, Fort Shafter, T. H.

Alaskan Communication System, 517 Federal Office Building, Seattle, Washington
War Department Message Center, Washington, D. C.

Address mail to: The Signal Corps Liaison Officer
Research Council, Academy of Motion Picture Arts and Sciences, Hollywood, Calif.

CORPS OF ENGINEERS (Military)

Contracting Officer, Office of the Chief of Engineers, Room 2215, War Department, Washington, D. C.

Corrugated steel arches; cotton and canvas bags; drafting, photographic, lithographic, photo-engraving, and surveying equipment; steel bridges, buildings, dredges, power shovels, storage tanks, sawmills; heavy machinery, boilers, cranes, hoists, jacks, hydraulic presses,

transformers, gasoline and electric engines; locomotives, railroad cars, and air-brake equipment; hand tools; dump wagons; camouflage equipment, Air compressors and tools.

Engineer supplies and equipment of a nature similar to that listed above are purchased to a limited extent by the following agencies:

Address mail to: The Engineer
First Corps Area, Army Base, Boston 9, Mass.

Second Corps Area, Governors Island, N. Y.
Third Corps Area, U. S. Post office and Court House, Baltimore, Mass.

Fourth Corps Area, Old Post Office Bldg., Atlanta, Georgia
Fifth Corps Area, Fort Hayes, Columbus, Ohio

Sixth Corps Area, 1300 New Post Office Bldg., Chicago, Ill.

Seventh Corps Area, Federal Bldg., 15th and Dodge Streets, Omaha, Neb.

Eighth Corps Area, Ft. Sam Houston, Texas
Ninth Corps Area, Presidio of San Francisco, Calif.

Address mail to: The Officer in Charge
The Engineer Reproduction Plant, The Army War College, Washington, D. C.

Address mail to: Engineer Supply Officer,
Engineer Section

Columbus General Depot, Columbus, Ohio
San Antonio General Depot, Ft. Sam Houston, Texas

New York General Depot, 58th St. and 1st Ave., Brooklyn, N. Y.

San Francisco General Depot, Ft. Mason, San Francisco, Calif.

Schenectady General Depot, Schenectady, N. Y.

Address mail to: The Engineer Board
Fort Belvoir, Va.

MEDICAL CORPS

New York Medical Depot, Kenyon Building, 57th St. and 1st Ave., Brooklyn, N. Y.

Biologicals, drugs, chemicals, laboratory stains; medical, dental, surgical, and laboratory supplies; surgical, dental, hospital, and laboratory equipment; diagnostic, surgical, and dental instruments; X-ray machines and supplies; physiotherapy equipment; surgical appliances and dressings; field equipment; mess equipment; textile products.

St. Louis Medical Depot, 2d and Arsenal Streets, St. Louis, Missouri.

Biologicals, drugs, chemicals, laboratory stains; medical, dental, surgical, and laboratory supplies; surgical, dental, hospital, and laboratory equipment; diagnostic, surgical, and dental instruments; X-ray machines and supplies; physiotherapy equipment; surgical appliances and dressings; field equipment; mess equipment; textile products; veterinary equipment and supplies.

NOTE: Medical supplies and equipment of a nature similar to that listed above are purchased to a limited extent by the Medical Sections of the San Francisco General Depot, Fort Mason, San Francisco, California and the San Antonio General Depot, San Antonio, Texas.

COAST ARTILLERY CORPS

Submarine Depot, Fort Monroe, Va.

Submarine mine equipment and supplies.

Coast Artillery School, Fort Monroe, Va.

Scientific laboratory equipment.

are that your best bet is Army Ordnance or the Navy Bureau of Ordnance. These are the agencies which buy fighting equipment—guns, armor, combat vehicles.

Army ordnance buying is decentralized through its field offices (page 30), which are partially specialized as to the things they buy. On large and specialized contracts, contractors are picked in Washington, but on the run-of-the-mill stuff negotiating is done in the field. There is little widespread invitation to bid; a few contractors are called in for negotiation. You should get in touch with the nearest ordnance field office dealing in the goods you want to make and ask that your plant be surveyed.

Naval ordnance buying is all handled out of Washington. If you want to be considered, send data on your plant to the Chief of the Bureau of Ordnance, Navy Department, Washington.

Aircraft and flying equipment is bought by Army Air Corps, Wright Field Contract Section, Dayton, Ohio, and by the Navy Bureau of Aeronautics in Washington.

The contracting officer of the Office of the Chief of Engineers in Washington buys a substantial quantity of construction equipment, mostly of a normal commercial type.

All Army communication equipment is bought by the Signal Corps through its field offices.

The Chemical Warfare Service buys equipment for waging gas and incendiary war and equipment for protection of soldiers and civilians against gas attacks. Large contracts are cleared in Washington, but all negotiations are carried on through the district offices (page 31). Usual way of awarding contracts is to call in a few firms whose plants have been surveyed and negotiate with them. Contracts are almost always on a fixed price basis.

If you want a chance at Chemical Warfare business, get in touch with the nearest district office. There you can look over samples of the sort of thing CWS buys. If you think you could make some of them, ask for a survey of your plant. CWS officers will look over your machines, layout, labor force, and the like. If they like your setup, you'll be on the list for consideration.

To get a preliminary idea of CWS activities, send to Book Dept., Chemical Warfare School, Edgewood Arsenal, Md., for the pamphlet—"Chemical Warfare and the Chemical Warfare Service."

Regular Agencies Also in Market

The Maritime Commission is a substantial buyer, particularly in connection with the Liberty ship program of emergency freighters. Contracts placed with shipyards for these ships cover only assembly of materials, parts, and equipment furnished by the commission. Thus the commission has occasion to buy directly all the goods that enter into building and equipping a ship.

All this purchasing is done through the Washington office of the commission. Fixed price contracts are placed by negotiation. Negotiations, in turn, are based on informal quotations solicited from 15 or 20 potential suppliers. To make yourself eligible for an invitation to quote, you should visit or write to the offices of the commission and present the data on your plant.

The last big war buyer is the Procurement Division of the Treasury. This agency, in peacetime, is the federal

government's central buying agency. To it has been assigned the purchase of lend-lease goods other than those of a strictly military nature—stuff ranging from drugs and chemicals to road-building machinery. Although Procurement has state field offices, its war buying is done through Washington.

Informal proposals are submitted to all eligible suppliers, usually by telephone or telegraph. Awards are usually made to the low bidder up to his production capacity and then to other bidders if they are willing to meet the figure of the low bidder.

If you want a chance to submit quotations, write to the Director of Procurement, Procurement Division, 7th and D St., S.W., Washington. State that you would like to participate in war business, explain your financial standing and the goods in which you normally deal, and ask for a mailing list questionnaire. After filling out the questionnaire, you will be placed on the list.

III. GETTING SUBCONTRACTS

The great majority of firms which are not already in war work are likely to find the subcontract their easiest approach. If you get a subcontract from a firm holding a prime contract with one of the war agencies, you do not have the responsibility—difficult for a small firm to assume—of delivering finished military goods to strict specifications. You get the benefit of the production and technical experience of your prime contractor. You are free from most of the red tape of government business.

Most important, perhaps, your job can be geared to the facilities you have. Every complete arms job calls for a certain quota of tools and equipment. With the present reluctance on the part of the services to authorize unnecessary plant expansion, you'll find it hard to get a contract unless you have the needed facilities.

But you can take a subcontract to do that part of a job for which you have the equipment.

The thing you probably know best is how to go out and stir up some business. And that's the thing you need to know most when you go after a subcontract. There's no mystery about subcontracting. It's mostly a matter of getting business from the same sort of people you are used to doing business with in peacetime. And in just about the same way.

Find out whether firms with whom you ordinarily do business and who know you have war contracts. If so, try to get subcontracts from them before you start working the field.

It's possible to get lists of prime contractors and start canvassing them wholesale. Some people, if they're energetic and have a good story to tell, get contracts that way. But it's the hard way. Most prime contractors have expert brushoff departments especially to deal with you.

To save your time and that of the prime contractors, the War Production Board has established the Bureau of Contract Distribution with hundreds of field offices around the country. This bureau is essentially a contract brokerage outfit. Each field office is supposed to keep in touch with the prime contractors in its area and with their needs for subcontractors. It is the point of contact for

would-be subcontractors, and it is expected to bring the primes and the subs together.

Your cue, therefore, is to visit the Contract Distribution office nearest you. These offices vary greatly in skill and usefulness. You'll have to form your own conclusions as to what kind you are dealing with. If, after giving your local office a fair trial, you conclude you are getting nowhere, get a list of local prime contractors from this office and start cruising around.

Very likely, however, you'll encounter an active and energetic field office. It probably will have an engineering staff to go over your plant-survey data with you and help you decide what different kinds of things you are equipped to make. It's possible they'll recommend that you seek a prime contract for some particular item. If so, they'll tell you where to go and whom to see.

Alternatively, they may decide your case is hopeless. Nowadays, the field offices are inclined to tell you the truth if they think you just aren't equipped for war work. They'll recommend that you shut down or find some civilian business that doesn't compete with war needs.

Of course, you don't have to accept this verdict as final. Clever mechanics have taken, say, stamping machinery (for which there's practically no war demand) and rigged it to do a needed war job. But you'd better at least consider the advantages of taking no for an answer.

In your case, however, let's assume there are several types of jobs you might do. The good Contract Distribution offices will have files of prime contractors who are looking for concerns to do one of these jobs. They'll send you to one or more of these firms with a letter of introduction. Then it's up to you to convince the prime contractor you can do the job; he'll need some convincing, because he has to answer for the quality of the work you turn out.

Weakest point in this procedure is the method of finding out what your plant can do. It's hard to staff the field offices with engineers who have a sufficiently broad knowledge of all sorts of industrial operations.

Several schemes are now being tried which overcome this difficulty by having the prime contractor himself analyze the jobs he'd like to subcontract and determine what equipment is needed. The best known of these is the "Stanley Plan" being used in Chicago. A simplified variant is being tried in New England. If these schemes work out as well as the first experiments suggest, something like them may soon be used everywhere.

Basis of all these schemes is a system of code letters or numbers to designate particular types of machines. Prime contractors determine what machines are needed to do a job they have in mind. Then, instead of referring the job to Contract Distribution in terms of a finished product, they describe it in a set of code numbers indicating the equipment needed. In Chicago, lists of these coded jobs are published weekly; a would-be contractor needs only to look over the list and find what jobs call for his equipment.

The 13 regional offices of the War Production Board publish regional news letters—"War Production News." These carry lists of prime contract and subcontract opportunities, machines available for sale, machines wanted,

and the like. You should arrange with your local field office to get on the list to receive its news letter.

The new Smaller War Plants Law gives certain additional powers to the War Production Board which will mostly be exercised through the machinery of the Contract Distribution Bureau, though perhaps under a different name. Under this law, WPB can direct the armed services to award a specific contract to a particular firm.

This is a power which will doubtless be used sparingly, but its existence gives additional weight to the conclusions of your Contract Distribution field office if it decides you should have a prime contract. The law also empowers WPB to make loans or provide plant facilities to smaller firms who don't fit into any of the present arrangements for war credit. On this, see Section V.

Of very uncertain significance is still another section of the law which, in effect, creates a new category of contract midway between the prime contract and the subcontract. The Smaller War Plants Corp., a new WPB subsidiary, is empowered to take contracts from the Army and Navy and then sublet them to small firms. It's rather doubtful whether any widespread use will be made of this power, but if any such contracts are to be placed, you can keep in touch through the field offices of Contract Distribution.

As a subcontractor, you are entitled to most of the financial aids and tax concessions available to prime contractors. More about these in Section V.

IV. GETTING MATERIALS

Finding a war job is like finding a wife; when you do, you've only just started. To get into war work, even to stay in business in wartime, is to enter a new economic world—a world of rigid controls, where you are no longer an independent business man but simply one cog in a huge production machine that is trying desperately to keep all its gears synchronized. Operating decisions are no longer your own but depend, to an increasing extent, directly on conclusions reached far away in Washington—or maybe in London or even in Canberra.

You probably think of the regulatory system which still goes by the obsolete name, priorities, as a vast, inchoate, and contradictory mass of rules. Actually, it's less confusing and more pervasive than most people realize. By now (or, at worst, within a month or two) the priority system has emerged from a transitional period which brought it to the verge of utter confusion. Priorities began as a system of putting war work ahead of civilian work. Now it has become a means for regulating the input of raw materials, the output of end products, and the flow of goods through the whole economy, war and civilian.

Things were pretty bad while the change was being made, but they're straightening out now.

Regulation of material flow falls into three broad groups. First and biggest is the scheduling of materials to be fabricated—guiding the flow from the raw-material producer to the manufacturer of finished goods. This is done through the broad framework of the Production Requirements Plan.

Second is the handling of capital goods, the decision as to who builds a new plant, who gets a new machine,

where a new road shall go. These decisions are being centered in the War Production Board, are carried out through the issuance of PD-1A (individual) and P-19 (project) priorities granting approval to specific jobs. (See Section V.)

Finally, there is the problem of the nonfabricating industries—public utilities, railroads, mines, and the like. Their primary need for goods is maintenance and repair

and operating supplies. These industries will be handled through a new Maintenance Requirement Plan.

Control of Manufacturing

Basic element in the Production Requirements Plan is that, at the beginning of each quarter-year, WPB has before it an estimate of the material requirements of every fabricator in the country who uses more than \$5,000

WHERE TO GO FOR ASSISTANCE—

Initial point of contact of a manufacturer seeking war contracts or subcontracts should be the field offices of the War Production Board's Bureau of Contract Distribution. A second frequently used service is the local offices of the Priorities Bureau. Field offices of both types report to regional WPB offices at Atlanta, Boston,

State and City	Name	Address
Alabama		
Birmingham	P—Martin J. Lide	302-306 Phoenix Bldg.
Birmingham	C—L. E. Geoghegan	301 Phoenix Bldg.
Arizona		
Phoenix	P—Lee G. Browne	408 Security Bldg.
Phoenix	C—William I. Walsh	406 Security Bldg.
Arkansas		
Fort Smith	C—Frank P. DeLarzelere	13 North 7th St.
Little Rock	P—Charles S. Christian	Rector Bldg.
Little Rock	C—Alfred M. Lund	304 Rector Bldg.
California		
San Francisco	P—James A. Folger	1355 Market St.
San Francisco	C—Col. Francis M. Smith	1355 Market St.
Fresno	C—H. A. Mattern	314-318 Mattei Bldg.
Los Angeles	P—A. R. Thomas	1040 Western Pacific Bldg.
Los Angeles	C—Watt L. Moreland	1031 South Broadway
Oakland	C—W. P. Collins	209 Financial Center Bldg.
San Diego	C—Paul C. Farmer	510 Union Bldg.
Sacramento	C—Orlando McCraney	Farmers & Mechanics Bldg.
Colorado		
Denver	P—Virgil L. Board	521 U. S. National Bank Bldg.
Denver	C—El Roy Nelson	U. S. National Bank Bldg.
Pueblo	C—D. F. Stalker	Star Journal Bldg.
Connecticut		
Hartford	P—Edwin L. Howard	119 Ann St.
Hartford	C—Earle L. Milliken	Phoenix Bank Bldg.
Bridgeport	C—Raymond L. French	144 Golden Hill St.
New Haven	C—Chas. A. Newton	514 Liberty Bldg.
Delaware		
Wilmington	C—Bradley L. Geist	314 Penn Bldg.
Florida		
Jacksonville	P—George H. Andrews	530 Lynch Bldg.
Jacksonville	C—Chas. C. McCubbin	730 Lynch Bldg.
Miami	C—Forrest D. Banning	701 Congress Bldg.
Tampa	P—Herbert Brennan	901 Wallace South Bldg.
Tampa	C—Arthur B. Hale	901 Wallace South Bldg.
Georgia		
Atlanta	P—John B. Reeves	116 Candler Bldg.
Atlanta	C—J. V. Booth	116 Candler Bldg.
Idaho		
Boise	C—L. O. Johnson	409 Capital Securities Bldg.
Illinois		
Chicago	P—Edmund H. Eitel	20 North Wacker Drive
Chicago	C—Thomas N. Wynne	20 North Wacker Drive
Decatur	C—G. E. Hale	308 Standard Office Bldg.
Peoria	C—Ralph W. Pritchard	2d Floor, Alliance Bldg.
Springfield	C—Edward Gerrity	407 Leland Office Bldg.
Indiana		
Evansville	C—Vincent Terry	8 Koenig Bldg.
Fort Wayne	C—George A. Dinnen	410 Utility Bldg.

Chicago, Cleveland, Dallas, Denver, Detroit, Kansas City, Minneapolis, New York, Philadelphia, San Francisco, and Seattle.

In the list below, names with a "C" before them refer to men concerned with contract distribution, and those with a "P," priorities.

State and City	Name	Address
Indiana		
Indianapolis	P—Albert O. Evans	Circle Tower Bldg.
Indianapolis	C—Harry S. Rogers	Circle Tower Bldg.
South Bend	C—Howard E. Richardson	206 City National Bank Bldg.
Iowa		
Des Moines	C—Geo. Beese	708 Crocker Bldg.
Kansas		
Wichita	C—Harold Hartzell	1314 Union National Bank Bldg.
Kentucky		
Louisville	P—James T. Hosington	400 Todd Bldg.
Louisville	C—Prentiss M. Terry	200 Todd Bldg.
Louisiana		
New Orleans	P—Louis House Clay	423 Canal Bldg.
New Orleans	C—R. E. Judd	423 Canal Bldg.
Shreveport	C—John B. Ferchaud	916 Giddens Lane Bldg.
Maine		
Bangor	C—Charles E. Walker	44 Central St.
Portland	CDM—Herbert Payson, Jr.	142 High St.
Maryland		
Baltimore	P—T. M. Chandlee	1054 Baltimore Trust Co.
Baltimore	C—G. W. Creighton	1254 Baltimore Trust Co.
Massachusetts		
Boston	P—W. P. Homans	17 Court St.
Boston	C—Edward V. Hickey	17 Court St.
Fall River	C—Harold S. Ramsay	27 South Main St.
Lowell	C—W. E. Stanwood	Sun Bldg., 8 Merrimac St.
Springfield	C—H. G. Philbrook	95 State St.
Worcester	C—Dwight C. Daniels	State Mutual Bldg.
Michigan		
Detroit	P—James E. Wilson	7310 Woodward Ave.
Detroit	C—Stoner Yantis	7310 Woodward Ave.
Grand Rapids	C—Herman Pleasant	1004 Michigan National Bank Bldg.
Iron Mountain	C—George Wallner	400 Commercial National Bank Bldg.
Minnesota		
Duluth	C—Arthur J. Newman	416 Federal Bldg.
Minneapolis	P—Willard F. Kiesner	326 Midland Bank Bldg.
Minneapolis	C—Earl Pitney	326 Midland Bank Bldg.
Mississippi		
Jackson	C—A. G. McIntosh	605 Tower Bldg.
Missouri		
Kansas City	P—Charles B. Shaeffer	Mutual-Interstate Bldg.
Kansas City	C—R. W. Webb	508 Mutual Bldg.
St. Louis	P—Ward H. Goodloe	943 Paul Brown Bldg.
St. Louis	C—F. J. McDewitt	1131 Paul Brown Bldg.
Montana		
Helena	P—Oscar A. Baarson	Room 512, Power Block House
Helena	C—Howard Bogie	222 Power Block Annex

worth of metal each quarter. Inasmuch as the estimated production of raw materials is known, WPB proceeds to scale down the requirements of each fabricator to the point where total requirements will match total raw materials available.

The reduction is made in accordance with the war importance of the fabricator's product. Manufacturers of essential weapons wouldn't have their requirements cut

down at all. On the other hand, some manufacturers of consumers' goods (particularly durable) might be eliminated altogether.

Then WPB grants a priority rating or several ratings on the scaled-down requirements of each fabricator. In theory, it doesn't matter much what the rating is. If the job has been done properly, if all requirements have been scaled down until the total matches the total of available

ON PRIORITIES AND SUBCONTRACTS

State and City Name Address

Nebraska

Omaha..... P—Victor H. Black..... 512 Grain Exchange Bldg.
Omaha..... C—W. Ralph Morgan..... 501 Grain Exchange Bldg.

Nevada

Reno..... C—Edwin S. Bender..... Saviers Bldg.

New Hampshire

Manchester..... C—Daniel S. Hickey..... Amoskeag Industries Bldg

New Jersey

Newark..... C—R. L. Kennedy..... Globe Bldg.
Camden..... C—Frederick Cohen..... Broadway Stevens Bldg.
Trenton..... C—R. Emmett Carroll..... City Center Bldg.

New Mexico

Albuquerque... C—George Lusk..... 103½ West Central Ave.

New York

Albany..... C—F. J. Holman..... 112 State St.
Brooklyn..... C—Emile Z. Weinberg..... 16 Court St.
Buffalo..... P—Paul R. Smith..... 312 M. & T. Bank Bldg.
Buffalo..... C—Thos. J. O'Rourke..... 212 M. & T. Bank Bldg.
New York City.. P—Sydney Hogerton..... Chanin Bldg.
New York City.. C—W. O. Crabtree..... Chanin Bldg.
Rochester..... C—Mahlon Gregg..... Commerce Bldg.
Syracuse..... C—T. D. Harter..... 302 Starrett Syracuse Bldg.
Utica..... C—Earle R. Mason..... First National Bank Bldg.

North Carolina

Charlotte..... P—J. E. MacDougall..... Liberty Life Bldg.
Charlotte..... C—Eugene C. Ochsenreiter..... New Liberty Life Bldg.
Raleigh..... C—Irving F. Hall..... Sir Walter Hotel Bldg.,
P. O. Box 2658

North Dakota

Bismarck..... C—Paul W. Fawcett..... 14 First National Bank Bldg.

Ohio

Canton..... C—E. Oscar Kuendig..... 601 Commercial Bldg.
Cincinnati..... P—Elmer C. Henlein..... 34 East 4th St.
Cincinnati..... C—Thomas Grace..... 804 Union Trust Bldg.
Cleveland..... C—Henry F. Jordan..... Union Commerce Bldg.
Columbus..... C—B. C. Zuhars..... 513 East Town St.
Dayton..... P—Harold B. Doty..... 819 3d National Bank Bldg.
Dayton..... C—Collins Wight..... 819 3d National Bank Bldg.
Toledo..... C—Alvin E. Buchenberg..... 833 Security Bank Bldg.
Youngstown.... C—Leif Oyen..... 1002 Union National Bank Bldg.

Oklahoma

Oklahoma City.. P—C. F. Aurand..... 414-416 Key Bldg.
Oklahoma City.. C—Morton R. Harrison..... 540 Key Bldg.
Tulsa..... C—John H. Keys..... 435 Kennedy Bldg.
Tulsa..... P—Alfred E. Ballin..... 416 Kennedy Bldg.

Oregon

Portland..... P—John Fred Bergesch..... 806 Bedell Bldg.
Portland..... C—John G. Barnett..... 815 Bedell Bldg.

Pennsylvania

Allentown..... C—Ernest R. Fallin, Jr..... 506 Hamilton St.
Chester..... C—Abbott Smith..... 12-14 East 5th St.
Erie..... C—Harry B. Joyce..... 715 Erie Trust Co. Bldg.
Harrisburg..... C—Ritchie Lawrie, Jr..... Doehne Bldg., 24 South 4th St.
Johnstown..... C—John S. Wagoner..... U. S. National Bank Bldg.
Lancaster..... C—Arthur K. Barnes..... 655 Woolworth Bldg.
Norristown..... C—Felix P. Cross..... Norristown Penn Trust Co.
Philadelphia... P—George McGovern..... Broad Street Station Bldg.
Philadelphia... C—Orville H. Bullitt..... Broad Street Station Bldg.
Pittsburgh..... P—Charles F. Cruciger..... 403 Fulton Bldg.
Pittsburgh..... C—Charles E. Robinson..... 403 Fulton Bldg.
Reading..... C—John A. Archer..... 615 Penn St.

State and City Name Address

Scranton..... C—J. P. Eyre Price..... 415 First National Bank Bldg.
Wilkes-Barre... C—W. H. Pierce..... 53 West Market St.
Williamsport... C—Fred J. Livingston..... Susquehanna Trust Co. Bldg.
York..... C—Richard S. Cole..... 25 North Duke St.

Rhode Island

Providence..... C—Arthur J. Minor..... 530 Industrial Trust Bldg.

South Carolina

Columbia..... C—D. E. McDuffie..... 204-206 Manson Bldg.

South Dakota

Sioux Falls.... C—Fred M. Chase..... 309-310 Boyce Greely Bldg.

Tennessee

Chattanooga... C—Paul E. Shacklett..... 909-910 James Bldg.
Knoxville..... P—D. K. Porteous..... 2d floor Goode Bldg.
Knoxville..... C—W. W. Mynatt..... 204-205 Goode Bldg.
Memphis..... P—John K. Lester..... 2110 Sterick Bldg.
Memphis..... C—Arthur M. Field..... 2112 Sterick Bldg.
Nashville..... P—George S. Gillen..... 1014 Stahlman Bldg.
Nashville..... C—W. G. Whitsitt..... 1014 Stahlman Bldg.

Texas

Dallas..... P—John B. Joyce..... 11th floor, Fidelity Bldg.
Dallas..... C—A. J. Langford..... 4th floor, Fidelity Bldg.
El Paso..... P—Robert Stryker..... 223 El Paso National Bank Bldg.
El Paso..... C—L. A. Wilke..... 222 El Paso National Bank Bldg.
Houston..... P—George L. Noble, Jr..... 1020 Electric Bldg.
Houston..... C—I. M. Griffin..... 9th floor, Electric Bldg.
San Antonio... P—Carl Pool..... 801 Majestic Bldg.
San Antonio... C—P. E. Locke..... 816 Majestic Bldg.

Utah

Salt Lake City.. P—Ralph E. Bristol..... 248 South Main St.
Salt Lake City.. C—Bayard W. Mendenhall 306 David Keith Bldg.

Vermont

Montpelier.... C—A. M. Creighton, Jr.... 12 State St.

Virginia

Norfolk..... C—J. L. Mason..... 526 Dickson Bldg.
Richmond..... P—F. P. Walmer..... 10 South 5th St.
Roanoke..... C—J. L. Mason..... 118 Kirk Ave. SW.

Washington

Seattle..... P—William D. Shannon..... White-Henry-Stuart Bldg.
Seattle..... C—Harry J. Martin..... White-Henry-Stuart Bldg.
Spokane..... C—Lars Carlson..... Old National Bank Bldg.

West Virginia

Charleston..... C—E. J. McClees..... 24 Capital City Bldg.
Clarksburg..... C—Alex H. Cooper..... 759-761 Empire National Bank Bldg.
Huntington.... C—Frank Enslow..... 309-311 West Virginia Bldg.
Wheeling..... C—E. C. Drake..... Fidelity Bldg.

Wisconsin

Appleton..... C—Paul W. Romig..... 341 W. College Ave.
Bau Claire..... C—Dorance W. Walters..... 1284 Graham Ave.
Madison..... C—John D. Howard..... 405 Washington Bldg.
Milwaukee..... P—Frank J. Tharinger..... 7048 Plankinton Bldg.
Wausau..... C—Ray Miller..... 408 3d St.

Wyoming

Casper..... C—R. G. Corbett..... Box 1211

materials, then anyone who has a rating will get his allotment.

However, even bureaucrats are human, and the rating serves as a safety valve. It establishes that, if a mistake has been made and ratings have been issued on too much stuff, the man with the low rating gets left. As the system is perfected, this should happen less and less often.

In theory again, this system should provide a complete control. Ratings assigned to fabricators on definite quantities of goods would be passed along, up the stream of commerce, to arrive finally at the raw-material producer. The orders he received would just match his production because it was planned that way.

Obviously, it won't work out so neatly. Another safety valve is provided—allocation of raw materials. The raw-material producers submit their order books to WPB, which tells them which of the orders to fill. In order to do this intelligently, WPB has to know the final destination of the steel or zinc or rubber being ordered from the prime producer by intermediate processors.

How Allocation Works

The Allocation Classification System provides the way of doing this. Manufacturers of end products are required to attach to orders they place for materials and parts a code number identifying the use to which these supplies will be put. Code numbers run from 1.00 to 23.90. A code designation of 10.20, for instance, would indicate that the end product in question had to do with highway transportation.

When an intermediate fabricator buys material to fill the order from the end-product manufacturer, he passes on the code number designation. If the material he is ordering will be used to fill orders from several end-product manufacturers, he attaches several code numbers to the order, showing the percentage of the order to which each code number applies.

Thus, when orders finally get to the raw-material producers, they carry code numbers identifying the general purpose of products into which the materials will flow if the order is filled—and showing what will suffer if WPB decides not to have the order filled.

Your business has two points of contact with this system. Every day you have to attach Allocation Classification System code numbers to orders you place; four times a year you must fill out the Production Requirements Plan application form—PD-25-a. This document, four over-size sheets of fine print, calls for a remarkably searching analysis of the current status of your business and your material needs for the coming quarter. You report deliveries of each of your products for the last quarter and estimated production for the coming quarter, together with an analysis of the priority ratings and end uses of the deliveries you made in the last quarter and those you propose to make for the coming quarter. Then, for each material, part, or subassembly you purchase, you report your last-quarter consumption, inventory position, probable next-quarter consumption, and anticipated purchases. You must also show which of your products each material goes into. Next to the item of anticipated purchases you leave a blank space.

You send the form to the War Production Board, and after a while it comes back with quantities written into the blank space showing how much of each material you may purchase and giving you a priority rating on purchases up to that amount during the coming quarter. If your situation changes during the quarter so that you need more of some material, you may file a supplementary application—PD-25-f.

Maintenance Requirements

The Production Requirements Plan is designed to meet the needs of fabricating industries—plants which receive raw material, cut it up, and sell it to someone else. Such plants get their maintenance and repair goods more or less as an incident to PRP. But there's a considerable group of industries which don't chew up material but have substantial maintenance requirements—utilities, transportation, mines, and the like.

For the present, such firms are still operating under P-100—the general order granting an A-10 rating to all maintenance and repair needs—or under one of several orders granting high priority ratings to the maintenance needs of specific industries. Starting probably in the fourth quarter, they will be covered by a new Maintenance Requirements Plan, similar to but simpler than PRP.

To operate under MRP, a firm will submit a quarterly report, setting forth its maintenance requirements in the past quarter and an estimate of its maintenance needs, showing the amount of each material, in the coming quarter, together with a few figures on the total business it does. WPB will then decide how much of the requirements can be met, indicate these on the application, and return it with a priority rating or ratings.

Initial intention is to be rather liberal in approving maintenance needs. Probably approval will be given in full to any request the dollar value of which does not exceed 10% of gross business, where the percentage of gross business is less than or equal to the percentage of the industry as a whole.

Several priority ratings will be granted—a high rating such as A-1-a on a percentage of the requirements, A-1-c on another portion, A-2 on another, and perhaps A-8 or A-10 on the rest. These ratings would not be tied to particular goods needed, so that the firm could use the high rating on the hard-to-get stuff, the low ones on the easier material.

This scheme is still in its initial stages and may be considerably modified before it goes into effect.

Survivals from the Past

PRP and MRP, between them, will soon be governing most of the flow of raw material through industry. But priorities control has had a long history; a considerable number of devices have been tried at various times and some of them still survive. You should be able to recognize them.

Most important are PD ratings, P orders, M orders, and L orders.

The aboriginal form of priority document is the so-called PD rating. There are now two of them, PD-1A



In war business, not all roads but many of them lead to Donald Nelson's headquarters. Frequently, they end in his outer office, where Mrs. Belle Harte, receptionist, sets callers on the right path.

and PD-3A. Each of them attaches a priority rating to a specific order for goods. That is to say, it directs the supplier receiving the order to give it preference over other orders with a lower rating or none at all. And it permits the supplier to demand the same preference when he orders the materials he needs to fill the rated order. Individual ratings granted by the WPB are on form PD-1A, while those granted by the Army, Navy, Maritime Commission and other war-buying agencies (subject always to WPB review) are on form PD-3A.

Use of these forms is being steadily restricted. WPB is throwing most requests for priority assistance under PRP or MRP and limiting use of PD-1A to priorities on capital goods. It's entirely likely that the authority granted the armed services to issue PD-3A ratings will be similarly curtailed or even eliminated. These PD-3A ratings, issued in large quantities, obviously upset the careful scheduling of materials involved in WPB's operations under PRP. WPB can never hold down the total of ratings issued to the amount of the available supply if someone else is issuing ratings at the same time.

A P order grants a priority rating to a whole class of purchases. Usually it authorizes an important industry—such as aircraft or freight car builders—to apply a specified rating to all its purchases. Most of these blanket P orders have now expired or have been canceled, and the industries that had them are operating under PRP.

The M, or materials orders, in general, are directed to material producers. They tell the producer how to distribute his product. For instance, Order M-150 tells producers of aromatic petroleum solvents to fill orders rated A-2 or better, to set aside 25% of output for distribution as directed by WPB, and to divert the rest to manufacture of aviation gasoline. In some cases, M orders forbid certain uses of a product. Thus order M-9-c contains a long list of products in the manufacture of which the use of copper is forbidden.

M orders are still being issued, and there will be many of them in force for some time to come. But to an increasing extent their functions will be eliminated by allocations under the PRP-ACS program.

The L, or limitation orders, were chiefly important during the first six months or so after the start of the war—the period of forced conversion. These orders, generally, tell you not to make something. They are the orders which stopped automobile production. The typical order might establish monthly production quotas for some metal gadget until some date in May, June, or July of 1942 and prohibits production thereafter. Quotas may limit number of units, dollar value, or metal consumption.

Some L orders do more specialized jobs. They may limit sales to certain classes of customers or to orders bearing high priority ratings. They may forbid or limit use of certain materials in a product. They may limit production to certain standard sizes.

By and large, the only L orders you need to know about are those that are directed at your own industry.

V. GETTING THE PLANT

Capital for war production is of two types. Physical production facilities—anything from a sewing machine to a mile-long factory—constitute one kind; the other, of course, is money. Both are under wartime controls.

The basic control over physical production facilities is exercised by WPB; virtually every individual expansion of plant and equipment must be inspected and approved by that agency. Priorities and preference ratings on that kind of capital goods expansion are handled on a project-by-project basis; they are not granted under any of the broad schemes such as the Production Requirements Plan or the Maintenance Requirements Plan.

Small plant expansions, involving the installation of individual new machines, get a priority rating as a result of applications made on PD-1A forms, which can be obtained from a bank or WPB field office. This application form (when this is stamped "approved" it becomes a priority rating for purchase of the particular item) must be filled out and submitted to WPB's Bureau of Priorities in Washington. If you are in doubt about how to do this, you can get help at priority field offices of WPB (page 34). These field offices cannot grant ratings, however; they only give advice.

At present, the Army, Navy, and Maritime Commission also grant ratings on new machinery and plant, using the similar PD-3A form. It is probable that this power will soon be taken away from them. Meanwhile, however, if you are a prime contractor, you can get this sort of priority assistance by working through the procurement officer in charge of your contract.

Larger facility expansions—a whole new factory, for example—are handled also on an individual basis by WPB. But the board does not require a separate PD rating for each individual purchase. Instead, application is made on form P-19 for a limited blanket rating, which entitles the builder to apply that rating to all purchases made in connection with a specific project; blueprints of the project are made a part of the P-19 document.

Money is the one war commodity of which there isn't and won't be a scarcity. In all new credit systems which the government has established, the emphasis has been not on restricting credit to certain purposes but rather on making money more readily available for war work.

Your first points of contact in getting war credit can well be your own bank and the corps of financial advisers named by WPB's Bureau of Finance (page 39). These federal advisers do not make any loans themselves, but they are familiar with the various means by which war contractors and subcontractors can get financial help. They'll tell you whom to see, what forms to fill out.

If your own bank is able and willing to meet your needs at reasonable rates, you are likely to find this the simplest and quickest way to get money, but it is not necessary to use your own money or credit to finance your war plant facilities. There are several procedures by which you can arrange to have the government pay for it. If you are a prime contractor and need a few extra machines to execute a contract, you can arrange with the procurement officer to include in the contract a provision for government purchase of the machines you need; then you can use the machines and pay rent to the government.

Financing Through DPC

For larger plant expansions the Defense Plant Corp., an RFC subsidiary, offers the preferred arrangement. Under this scheme you build or buy the facilities with DPC funds. Title to the new facilities remains in the Defense Plant Corp., though you have an option to purchase after the war. You will pay a rental to DPC for the use of the facilities.

If you are a prime contractor, the rental will be \$1 a year plus maintenance and insurance. But the price you charge the government on your prime contract cannot include any thing for plant construction costs. If you are not a prime contractor, the rental will be based on value of the plant and depreciation rates.

Requests for DPC assistance are initiated either through the armed services or through WPB. Prime contractors anxious for aid should approach the procurement officers with whom they deal on their supply contract. Others should start with the nearest WPB financial consultant. Then the Bureau of Finance will clear the matter through WPB and make initial contact with Defense Plant Corp. At this point you will submit a formal application to DPC.

For the particular benefit of smaller firms, a service similar to that of the DPC will be offered by the Smaller War Plants Corp., now being organized in WPB. Procedures are not yet worked out, but when they are established you can find out about them through the local financial consultant.

If you do put your own money into new war plant, you are entitled to special tax concessions. Each year, for five, you may deduct from your net profit, when figuring taxes, a fifth of the cost of new facilities. That is, for tax purposes you may amortize plant in five years.

To get this tax-deduction privilege, however, it really has to be your own money that is invested in the plant. Before the Army or Navy will certify your plant for

rapid amortization, you will have to satisfy them that the prices you are charging the government on any prime contract do not include any item for plant beyond normal depreciation and wear and tear.

To qualify for rapid amortization, you must obtain from the Army or Navy a "Certificate of Necessity" certifying to the Treasury Department that your new facilities are really necessary for the war. You can apply for this Certificate any time within six months after you start building the facility.

If you are working on goods destined for the Army or the Navy, obtain an application form from the War or Navy Department, as the case may be, and submit it to Washington. You can also obtain an application from the Bureau of Finance. If you are not working directly for either service but feel that your new facilities are important to the war effort, you may still submit an application to one of the two departments.

To get working capital you have to use your own credit. But if the job you are doing is important to the war effort, your credit doesn't have to be very good. There are several arrangements for getting working capital on easy terms.

It is now legal to assign a government contract as security for a loan. Thus, if you are a prime contractor you can very likely obtain a loan from your own bank on the security of your contract. In writing the contract, you may avoid future trouble by inserting a clause specifying the kinds of assignment that will be permitted.

If your bank isn't interested, the RFC may be able to help you. Loans are now made to corporations engaged on war work without the usual RFC insistence on sound security. Application is made through field offices of the RFC (get the address of nearest one from your bank). Loans up to \$100,000 are made directly in the field. Larger loans are referred to Washington for approval. Loans carry 4% interest.

Guaranteeing Bank Loans

To encourage banks to make war loans, the Army, Navy and Maritime Commission now have worked out a plan with the Federal Reserve by which the bank will be guaranteed against loss. Your own bank can approach the Federal Reserve on this, or you can go directly to the nearest Federal Reserve Bank. In either case, the application will be reviewed by one of the services as to the war urgency of the loan. Interest on these loans runs to 5%. In exceptional situations Reserve Banks can also make direct advances to provide working capital.

Prime contractors have still another possibility. They may obtain advance payments on their contracts up to 30% of the uncompleted value of the contract. Interest rate on these loans is 2½%. To get such an advance, work through your procurement officer.

In some cases, sub-contractors can obtain advances from their prime contractors. If the prime contractor is making such advances, the Army or Navy will increase the amount of its advance to him to 50% of the value of the contract.

The Smaller War Plants Corp. will be empowered to make loans, particularly to subcontractors and other

small firms. This system is not designed to replace any of the existing credit patterns but rather to handle marginal cases that don't fit into any of them. For instance, situations sometimes arise in which a firm can't get a contract unless it has credit and can't get credit unless it has a contract. SWPC will try to resolve such an impasse as this.

VI. GETTING THE MEN

Of the elements entering into production, manpower is still the least tightly controlled. Thus far supply of manpower has occasioned little difficulty. There have been shortages of critical skills here and there, but only now is a real shortage of labor showing up. By the middle of fall it's likely to be squarely on us.

You haven't yet had to get accustomed to any unusual procedures in getting your labor, but it's clear that you soon will. The general pattern of those procedures is already becoming evident, although it will still be some months before you can know definitely what it is.

Formal, all-out allocation of labor—with every man told where to go and what to do—is not in early prospect. If the war lasts long enough, you can expect passage of a National Service Act permitting such allocation. But there are a lot of intermediate stages to be gone through.

In the absence of legal authorization for labor allocation, the War Manpower Commission has two major tools at its command for putting people where it thinks they ought to be—the Selective Service System and the U. S. Employment Service.

Selective Service is usually thought of simply as a means of getting men for the Army. Actually, it is designed as a device for placing men in positions where they will contribute most to the war effort, whether that be the Army or war production. In the exercise of this discretionary function, the system has not always functioned with a maximum of precision because of the large amount of authority given the local boards. Even directives from national headquarters are ordinarily just advisory to the local draft boards, and they are free to disregard them if they think local conditions warrant. As an instrument for balancing manpower needs and supply, the system has also fallen short of perfection because under it no man of military age (with minor exceptions) is exempt from the draft. Hence, the status of critical workers is always precarious, for their deferment from Army must be considered only temporary.

Double-Barreled Effect

Selective Service has a two-way effect on industrial employment. On the one hand, safeguards are set up so that the Army will not strip essential industries of irreplaceable men. On the other hand, the threat of Army service is used to push men from non-essential into essential jobs.

Deferments are granted to employees in two types of industries—those directly involved in the war (the munitions industries) and those civilian industries which have to be kept going if the nation is to be economically healthy enough to carry on a war. These last are the

WHERE TO GO ABOUT MONEY

Regional advisers from WPB's Bureau of Finance have no money to lend war contractors, but they know where it can be had.

Region and City	Name	Address
Atlanta Region		
Atlanta	Clarence Knowles	116 Chandler Bldg.
Jacksonville	James J. French, Jr.	730 Lynch Bldg.
Knoxville	A. P. Frierson	204-205 Goode Bldg.
Memphis	St. John Waddell	2112 Sterick Bldg.
Boston Region		
Boston	Fred R. Hall	17 Court Street
Hartford	Edward R. Barlow	Phoenix Bank Bldg.
Providence	Ralph H. Koelb	530 Industrial Trust Bldg.
Chicago Region		
Chicago	Harry R. Kimbark	20 No. Wacker Drive
Indianapolis	Henry Ketcham	Circle Tower Bldg.
Milwaukee	Paul P. Robinson	7048 Plankinton Bldg.
Cleveland Region		
Cleveland	Frank Gibson	Union Commerce Bldg.
Charleston	F. O. Lamb	24 Capital City Bldg.
Cincinnati	Justin J. Stevenson	804 Union Trust Bldg.
Louisville	Joseph T. Simmons	200 Todd Bldg.
Pittsburgh	Mark Grubbs	405 Fulton Bldg.
Dallas Region		
Houston	O. W. Jackson	1016 Walker Ave.
New Orleans	G. L. Woolley	423 Canal Bldg.
Denver Region		
Denver	Robert W. Frye	708-714 Kittredge Bldg. 16th & Glenar Sts.
Detroit Region		
Detroit	Charles W. Renfrew	7310 Woodward Ave.
Kansas City Region		
Kansas City	Alexander Silberberg	508 Mutual Bldg.
St. Louis	R. Jewett Jones	943 Paul Brown Bldg.
New York City Region		
New York City	Erwin Rankin	122 East 42nd St.
Buffalo	H. L. Underhill	212 M & T Bank Bldg.
Newark	Walter H. Hick	Globe Bldg.
Syracuse	Richard Robertson	224 Harrison St.
Philadelphia Region		
Philadelphia	W. W. Moss	1617 Pennsylvania Blvd.
Richmond	Phillip Goodwin	Johnson Publ. Bldg. Fifth & Cary Sts.
Minneapolis Region		
Minneapolis	Guy F. Jensen	326 Midland Bldg.
San Francisco Region		
San Francisco	Leonard Woolams	1355 Market St.
Los Angeles	Frank C. Mortimer	1031 South Broadway
Seattle Region		
Seattle	Geo. W. Klinefelter	239 White-Henry-Stuart
Portland	A. C. Ruckdeschel	815 Bedell Bldg.

basic industries like food, clothing, and transportation.

Not everyone in such an industry is deferred. Unmarried employees are deferred only if they fill critical occupations. A critical occupation is one involving a skill of which there is a scarcity and for which it takes time to train a man. Even then, in theory, the deferment is only for the time necessary to train a replacement. But in many war industries expansion of employment is going on so fast that training will never catch up with the shortage of skilled men, and an occupational deferment is likely to be renewed time after time.

Fundamentally, the decision as to what industries are directly or indirectly essential to the war effort and what occupations in these industries are critical is up to the local draft boards. The Selective Service System, however, is issuing advisory rulings on certain industries. These point out the importance of the industry and list the occupations in it which appear to be critical. Such rulings are prepared in consultation with the industry and with interested government agencies.

If your industry is not already covered by such a ruling

and you think it ought to be, take up with your trade association the question of approaching Selective Service on the matter.

An unmarried man in a non-essential industry has strong inducement under this system to move into a war industry, if he has a skill the war industries need. If he lacks a war-important skill, it would do him little good to move since he would not fit into an occupation considered critical. Such a man is unquestionably ear-marked for the Army.

Married men are treated on a different basis. At present, of course, married men are not ordinarily inducted into the Army. But everyone knows that they will be next year, and the Selective Service is using this fact to push married men—with or without critical skills—into essential industries.

Two classifications are set up for married men. Those in non-essential industries are classified 3-A and will be the first married men to be called. Those in essential industries are classified 3-B and will be the last to go. In order to rate a 3-B classification, a man does not need to fill a critical occupation; it is sufficient if he is working in an essential industry.

As a result of the operation of the draft policy, America's labor supply situation shapes up about like this: The Army draws principally upon the reservoir of unskilled men; the war industries are staffed with a few irreplaceable single men, a considerable body of married men and men past military age, and women; the non-essential industries get what labor they can—mostly women.

At the direction of the War Manpower Commission, the U. S. Employment Service is already operating a partial system of labor priorities. That is, when several plants ask a USES branch office for men, the Employment Service fills first the requests coming from war-important plants. WPB furnishes the service with information as to the relative importance of different plants.

Obviously, all that is needed to transform this method into a rather thoroughgoing set of labor priorities is the requirement that all plants obtain their labor through

USES. First steps in this direction are now being taken. War plants in a few areas of critical labor shortage and areas where labor pirating is common will be told to do their hiring through the Employment Service, but there will be an important exception. Unions with closed shop contracts that have been in the habit of furnishing labor to employers will be allowed to continue to do so—on the understanding that they will give the same priority to important plants as does USES. Certain recognized and well-established private employment agencies may get the same privilege.

This is the famous job-freeze; and this is all it amounts to as yet. In operation, it means that a worker will not leave one war plant in a shortage area and go to another war plant without the approval of the Employment Service.

If such a system is to work without creating a vast amount of resentment, wages paid in different war plants for the same skills must not reflect too great discrepancies. This problem is recognized, but no satisfactory approach to its solution is yet clearly in sight. Most active approach so far is through regional stabilization agreements. In these agreements, employers and labor from a whole industry in a particular region (West Coast shipbuilding, for instance) get together with government representatives and agree on standard wages and working conditions.

Through the second half of 1942, compulsory resort to USES in all hiring will spread from area to area, will eventually become universal. According to present intention non-war plants will be exempted, on the theory that the pressure of Selective Service plus the generally higher wages of war industries will prevent any raiding of war plants by civilian plants.

This general system has the advantage that it can operate without any direct compulsion on the individual worker—simply by making it easier for him to do what he's supposed to do. Whether this is as far as the War Manpower Commission will have to go depends on the stringency that develops in labor supply. If things get too tight, Congress will undoubtedly be asked to authorize direct routing of individual workers.

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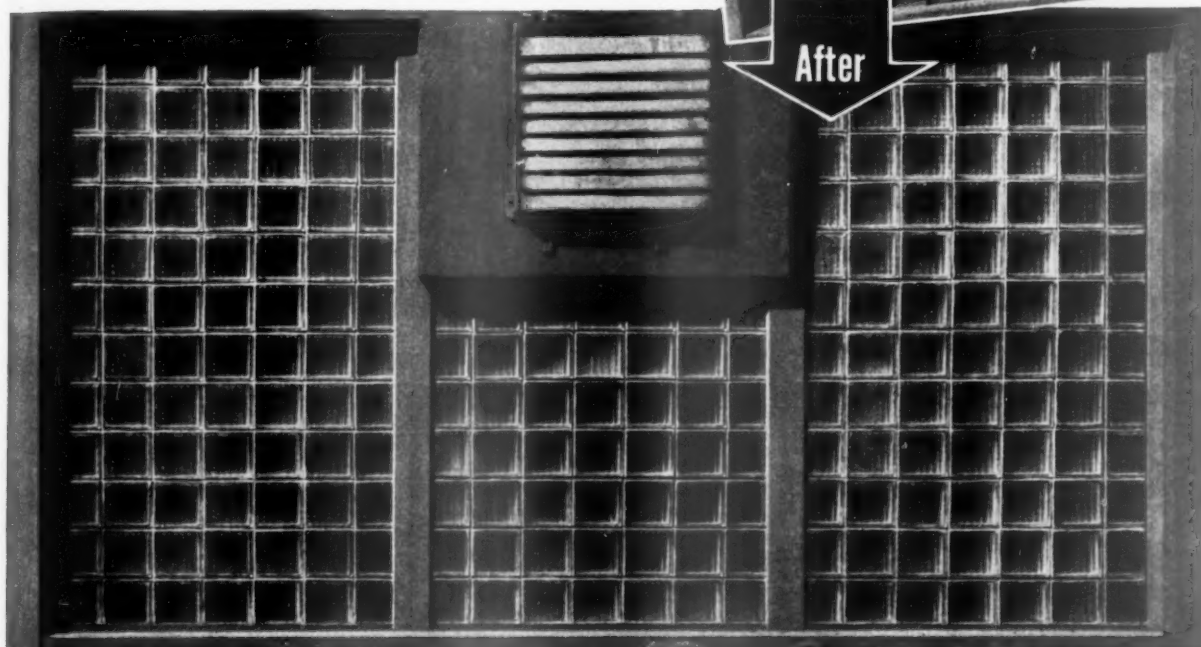
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THE WAR—AND BUSINESS ABROAD

Aleutian Seizures Are Serious

Japan's toehold on North America not only carries threats against our mainland but also gives Tokyo defensive advantages while creating new problems for the Russians.

Washington has deliberately minimized the Japanese landings on our Aleutian Islands, and willingly allowed war news in the Pacific—since our victory at Midway—to be overshadowed by the United Nations disasters at Tobruk and Sevastopol. But the 65,000 Americans in Alaska and the millions along our West Coast are not fooled.

At The Halfway Point

Attu, the first of the Aleutians occupied by Japan, is almost exactly halfway between Tokyo's northernmost naval and air base at Paramoshiri (BW—Jun. 20'42,p54) and our westernmost base at Dutch Harbor.

And Kiska, second island occupied by the Japanese, besides being only 585 miles from Dutch Harbor, has one of the finest harbors for naval planes in all the Aleutians.

It is true, as Washington has reported, that these outposts of our Alaskan territory are almost uninhabited, but they are not uninhabitable. When Russian fur traders first arrived in the Aleutians, the islands supported a population of 25,000. The whole string of larger islands is still dotted with abandoned village sites, many of which can be quickly improvised by the crafty Japanese into airfields. Kiska alone is half the size of Long Island. And the climate on all the islands, while unpleasant because of the almost continuous fogs and rain, is relatively mild.

Where The Threat Lies

There are four potential dangers to which the United Nations are exposed by the thrust made by the Japanese into our territory:

(1) If Tokyo can hold and fortify these two islands, it means that the Japanese navy is in control of the Northwest Pacific, and that Japan is in an advantageous position to strike at Dutch Harbor, which—with Kodiak and Sitka—is the key to our whole defense of Alaska. Attu is 769 miles from Dutch Harbor; Kiska is roughly 200 miles closer. Attu is only 765 miles from Japan's base at Paramoshiri, and less than 730 miles from the nearest Russian naval and air base at Petropavlovsk. Kiska is no farther from Alaska than Rabaul is from Australia, and months of steady United Nations bombing have failed to dislodge

the Japanese from that base, once the Nipponese won a toehold.

(2) Occupation of Kiska brings the Japanese within 2,300 miles of Seattle, and gives them a protected northern flank less than 2,000 miles from Midway. Neither is too far away for long-range bombing from Kiska, but the new base is more likely to be used to protect aircraft carrier and fleet operations aimed at Alaska, Canada, and our own Northwest.

(3) If, as is confidently expected in most military circles, Japan attacks Siberia as soon as Hitler's Middle Eastern blitz gets fully under way and the Soviets are desperately occupied in the Ukraine, United States aid to Asiatic

Russia can be more effectively attacked by Japan now that its Paramoshiri base is supplemented by minor bases on Attu and Kiska.

(4) The greatest importance of Japan's new outposts, however, from the long-term point of view is the advantageous position they give Tokyo to keep a careful watch from reconnaissance planes over American invasion attempts from Dutch Harbor, as well as potential bases for defensive action against attacks on Japan from the north, or in conjunction with Russia, across the Bering Sea.

A Loose Hold—But Serious

Tokyo has no more than a loose hold on these first strategic grabs in North America. If we could concentrate our naval and air strength on Attu and Kiska for a few days we could easily drive them out. But we can't run the risk of drawing any of our ships or planes from Hawaii, Midway, Australia, or Panama, or Japan would strike at these more vital bases. That's what makes Tokyo's Aleutian thrust so serious. Tokyo's toehold is probably on the way already to becoming one more fortified zone to prolong Japan's resistance against our ultimate Far Eastern offensive.



Hitler's dangerous new threat to Egypt and to Britain's tenuously-held lifeline through the Mediterranean following the Nazi capture of Tobruk raises fresh fears that the Axis will complete a junction in the Middle East, tightening its hold on the rich resources of the East, including Malayan rubber (BW—Mar.14'42,p34). This explains Washington's renewed interest in its infant rubber develop-

ment projects in this hemisphere. Guayule offers the quickest crop, Brazilian Hevea the soundest long-term supply source. But even the more optimistic experts don't expect to get more than 30,000 tons of natural rubber out of Latin America this year—against restricted requirements of 650,000 tons. This leaves the real supply job for the next critical years up to the new synthetic producers.

KEEP THOSE CARS *FREE!*

THIS advertisement is about freight cars. It is addressed to the shippers of America who share with the railroads in the task of keeping the nation's vast war program on the move.

That calls for the greatest transportation job in history.

We are moving a million tons of freight a mile every minute. We start a new freight train on its way *every five seconds.*

Equipment is working as it never worked before, with an efficiency not even approached at any time during the last war. Government agencies dealing with transportation, including the War and the Navy Departments, the Office of Defense Transportation and the Offices of the Coordinators for Petroleum and for Solid Fuels, are working with us. And shippers, throughout the land, are cooperating magnificently.

Those are the reasons why, with fewer cars and locomotives than

were used in the last war, we've been able to beat all records.

But this is no time to be complacent.

War needs for steel and other materials limit the amount which can be used for building additional cars. That means that the job ahead must be done not with what we should like to have but with what we can get.

So we ask you — for the good of the nation — to be sure that everything possible is being done to keep freight cars free.

The rules are simple: Load cars as soon as you get them. Load them to capacity. Unload shipments as soon as they arrive. And it's up to the railroads to keep 'em moving.

All the railroads in America are working together for victory. We know you'll do all in your power to keep cars rolling.

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**All the railroads in America
are working together for
victory. We know you'll
do all in your power to
keep cars rolling.**

WASHINGTON, D.C.

The Story That Must Be Told



Two men who know the story best: Donald Nelson, Chief of the U. S. War Production Board, and (right) Oliver Lyttelton, Great Britain's Minister of Production.

BETWEEN THE LINES of today's war news is written a story that is even more vital than the news itself. For through that story we begin to discern the pattern of victory, not yet complete in all its details but increasingly clear in its essentials.

It is the amazing story of how American industry has responded to the call for the weapons of total war, of how its technicians, workers, and managers are driving through an unprecedented task of fantastic size and complexity.

France fell in June 1940. During that month this country produced about \$150,000,000 in war goods. By June 1941 the Nazis had overrun the Balkans; and in that month our war production was \$800,000,000. The fateful month of December 1941 gave us an output of \$1,800,000,000—an increase better than tenfold in eighteen months. And in May 1942 our total expen-

ditures for war equipment and supplies mounted to the staggering total of \$3,500,000,000.

This is an increase of twentyfold within two years, of itself a stupendous industrial achievement. But what is even more important, that achievement already is making itself felt the world over—in the Orient, in Australia, in Libya, in Europe, in the Coral Sea, at Midway Island, at the Aleutians, and wherever else we find a battlefield manned by free men.

To accomplish it, many industries have been pouring out war materials at a rate that only six months ago did not seem even remotely possible. Starting from scratch, our factories have turned from their peacetime jobs, first to meet and then to surpass the most hopeful estimates of what might be expected of them.

To do this they have drawn heavily upon all of their resources. Their skilled and unskilled

man-power has thrown into the task a war-born will to work; their research staffs have bent to it all of their scientific resources; their engineers have applied to it their utmost ingenuity; their executives have devoted to it the full measure of that managerial skill which has won for American industry the respect of the modern world.

For the first time in history we have pushed the accelerator of the world's greatest engine of mass production down to the floorboard. Always in times of peace, factory men have had to gear production to what the markets would take. But now the market they are called upon to serve is hungry for the last ounce of potential output. For war confronts industry with a demand limited only by its capacity to produce.

During these feverish months, while a desperate world has watched breathlessly to see how American industry would perform as the arsenal of democracy, we of McGraw-Hill have followed with mounting pride—at times almost with wonder—a new miracle of industrial achievement.

Some day the full story of this American industrial effort will fill a brilliant chapter in the epic history of our times. Meanwhile it would be premature to celebrate the completion of this task. For victory has not yet been won; that still lies at the far end of a road that we may find to be long and arduous.

But even now we can be certain of one essential of that victory. American industry is doing its job; it is delivering all that the people have asked of it—and more.

As I have watched with my associates the unfolding of this picture, I have wished that it were possible to broadcast it, in full color and wealth of detail, to the people of America, so that they could understand at least, in part, the job their industry is doing for them. It would help, it seemed to me, if the men of industry themselves, each so intent on his own task, knew what their fellow-workers in other fields have been doing.

However, the managers of industry have been far too busy *doing* to talk. They are going to be just as busy for some time to come. Naturally, many details are yet to be spread upon the record and, indeed, the full story cannot be told. But that part of the story that can be told is well worth the telling and the hearing, if only for its revelation of the spirit of an awakened

America, throwing its all into the fight against the tyranny that has brought so many of the world's little people under its heel.

The 1941 war production of the United Nations, exclusive of the United States, equalled the total 1941 war output of Germany with all of its captive plants and enslaved labor. Since Germany's 1941 operations were at maximum capacity no further increase is possible. British output has been expanding to the point where its 1942 production is considerably ahead of Germany's.

In May 1942 American war production passed the British output 50 days ahead of schedule. In 1943 it will be 3 times that of the British.

This has been brought about under the leadership of Donald Nelson and the War Production Board, the Army, the Navy, the Maritime Commission, with the cooperation of management and labor. It has been furthered by the cooperation of Oliver Lyttelton, British Minister of Production, and other British production authorities.

But the story goes far beyond that. It gives us a glimpse of the America as it will emerge from this war, its industries again setting world standards of production, which will become the spearhead of our post-war economy.

This is a story that cannot be adequately told in generalities. It must be told in some detail. For instance, the great accomplishments of the machine tool industry, the great forward strides made by the aviation industry, the tremendous achievements of the chemical industry, the amazing conversion of many industries will warm the hearts of Americans.

These aspects of the subject deserve the fullest treatment and will be told month by month in these pages until the story has been completely unfolded. We will try to give a concise overall picture of the war job that industry has done and still is doing. You will find it a thoroughly American story of high American achievement in which every American can take pride and from which every American can take hope for the future of his country.

The story is far too significant to be withheld any longer.

James H. McGraw, Jr.

President, McGraw-Hill Publishing Company, Inc.

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General Foods Declares Preferred Dividend

Directors of General Foods Corporation, at a meeting held June 17, 1942, declared a quarterly dividend of \$1.12½ a share on the 150,000 outstanding shares of the company's \$4.50 Cumulative Preferred Stock. The dividend is payable August 1, 1942, to holders of record July 10, 1942.

* * *

Among the products of General Foods are: Baker's Cocoa—Baker's Coconut—Baker's Premium Chocolate—Birds Eye Frosted Foods—Calumet Baking Powder—Certo—Diamond Crystal Salt—Grape-Nuts—Grape-Nuts Flakes—Grape-Nuts Wheat-Meal—Jell-O—Jell-O Freezing Mix—Jell-O Ice Cream Powder—Jell-O Pudding—Kaffee Hag Coffee—La France—Log Cabin Syrup—Maxwell House Coffee—Maxwell House Tea—Minute Tapioca—Post's 40% Bran Flakes—Post Toasties—Postum—Sanka Coffee—Satina—Sure-Jell—Swans Down Cake Flour—Whole Bran Shreds.

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Behind the War Headlines

Washington is almost ready to announce the formation of a government import agency which will control all imports from Latin America. It is the newest development in the hemisphere economic program, but it is forced to a head at this particular time by the acute shipping situation. Will Clayton, long-time friend of Nelson Rockefeller and recently a member of the Reconstruction Finance Corp., is expected to head the new agency.

• **Upper Hand**—Technically, Washington has no control over which items Latin American countries choose to send to the United States. Actually, this country can control even these shipments because the United States is now pledged to buy large quantities of Latin American commodities in order to bolster local economies that are threatened with collapse because of the loss of European and Far Eastern markets.

Should any country refuse to cooperate in a shipping program that is dictated by the wartime demand in the United States to haul manganese, for instance, instead of champagne, Washington can stop its purchases of surplus commodities from that country.

• **Liquidation Job**—The new agency may have the additional job of helping to liquidate the Axis properties which have been seized by various Latin American governments. In the case of the German and Italian airlines, the United States more than a year ago helped squeeze them out of Latin America by acquiring their properties or setting up parallel lines (BW—May 17 '41, p. 16).

Selling Coffee to Brazilians

Stunned by the prospect that their market in the United States will be sharply curtailed because of the shipping shortage, and impressed with the good effect of their advertising campaign in the United States, Brazilian coffee growers are planning to advertise their product in the home market and may try some of the same copy appeal that was so successful in the United States.

From 1900 to 1937, coffee consumption in the United States increased from 10½ to almost 13½ lb. a person, but between 1937 and 1941, when a steady flow of advertising was used in the United States press, there was a further jump of more than 3 lb.

Iced coffee is an almost unknown

drink in Brazil, despite the heat and the cheapness of coffee, and the use of coffee as a flavoring for ice cream, cakes, and candy is unheard of.

Air Service Extended

Latin American air service received a boost this week when President Ricardo de la Guardia signed a decree permitting TACA Airways to fly over Panama and land at the airport at David. TACA is an 11-year-old service which American Export Airlines tried to buy in 1940 (BW—Oct. 12 '40, p. 62), when the Civil Aeronautics Board refused to sanction the deal.

In 1939, last year for which operating statistics were released in New York, TACA's fleet of 52 planes carried 22,000,000 lb. of freight, 3,500,000 lb. of mail, and 65,000 passengers over its network of Central American services. Sole competitor of TACA is Pan American Airways.

Workers Travel Cut-Rate

LONDON—Workers in Britain's war industries who have been transferred to industries in new localities, are being given transportation to their homes at a reduced rate for summer vacations this year.

The new plan, intended to encourage workers to accept employment where they are most needed to speed up the war production program, enables transferred workers to get passes to travel any distance at a maximum cost of \$1.50.

Grain Exchange Spared

OTTAWA—Attempts by opposition members of the Canadian House of Commons committee on agriculture to have the Winnipeg Grain Exchange closed for the duration of the war, on the ground that brokers' commissions come out of the pockets of western growers, is falling flat. Britain's Cereal Import Committee, consulted by Ottawa, has urged continued functioning of the exchange as a medium through which Canadian wheat can be purchased regularly.

Canadian shipping authorities are cooperating with Washington's Defense Transport Administration in providing lake boats for the shipment of extra supplies of iron ore for United States steel mills, but they do not anticipate any shortage of carriers for the movement of Canadian wheat down the lakes.

Duties Due to Go

Canada sees faster flow of war goods between Dominion and United States under program outlined by Roosevelt.

OTTAWA—Word has reached Canada that Washington is about ready to announce specific plans to put into operation President Roosevelt's recent directive to department heads for removal of customs duties from war goods entering the United States. Ottawa is already preparing reciprocal action.

The importance of the move is enhanced by further word that Washington is planning to boost its annual war buying in Canada to at least a billion dollars as a contribution towards lifting North American war output to capacity and strengthening the hemisphere war economy.

• **What Are War Goods?**—Canadian officials are hazy about the goods classifications which will be covered by the new free-entry decrees, but general terms of the Washington ruling, as understood here, are capable of very broad interpretation. They merely assert that Canadian goods, to enter the United States free of duty, must be "war goods" and must be imported on emergency order. Canadians believe it is conceivable that these stipulations could be stretched to cover food products for U. S. forces or for supplying the United Nations.

As Washington now pays the duty on Canadian raw materials for war production and passes them on to fabricators with the duty cost deducted there will be little effect on the flow of these goods, but under the new plan Canadian exporters will be relieved of a lot of clearance formalities.

• **How Canada Handles Duties**—On Canada's part, war goods bought in the United States by government-owned and government-assisted companies designated as official agents of the Munitions and Supply Department, and goods which enter the production of war equipment for Britain have been coming into the Dominion free of duty, but imports by private war contractors have been dutiable. Reciprocal action by Ottawa probably will place these goods on the free list. War production machinery, steel, and other raw materials will be affected.

The allocation system is going to become a means of bringing Canadian industry and business under fuller government control. Objective in carrying out the move now is to conserve shipping space and other facilities, and to control overhead costs in order to protect the anti-inflation price structure.

• **Regulating Flow**—More specifically, it will mean the redistribution of markets



No Accident Policy Can Cover Loss of Time

... And Time is Precious These Days!

Today's most serious loss in industrial accidents is *lost time*.

That's why accident prevention is all-important these days. Safety precautions must never be relaxed.

Atlas Manasite Blasting Caps, for example, have made safety precautions more effective, wherever commercial explosives are used. Exclusive in design, they increase the margin of safety in blasting operations, because they are less sensitive to impact and friction. They substantially diminish the chances of accident through inadvertent mishandling.

Steps toward greater safety are vital to war effort; and Atlas has made many contributions to improving the safe handling of explosives.

In other Atlas products, the safety factor is not so essential. Finishes, chemicals and carbons are not explosive, but they are leading products in the Atlas family which have great significance in war production.

Yet with all our involvement in the war economy, we are doing our best to maintain the flow of our services. The job is tremendous; but with ingenuity, understanding, and the continued cooperation of our customers, we can go a long way.

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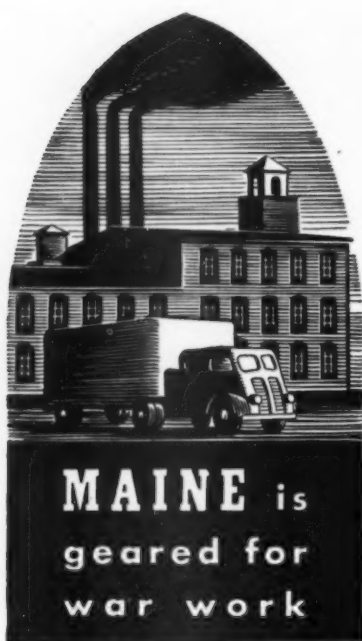
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This complete picture of Maine as an industrial area has been prepared under state supervision. It has been an eye-opener for manufacturers who thought of Maine as just vacation land.

Send for this book. It is free. It helps to locate Maine, industrially—overnight from the most urgent markets. It shows what other manufacturers have done with skilled Maine hands and Yankee ingenuity. It lists resources, shows favorable taxes, demonstrates power economies.

Maine offers a combination of industrial advantages that cannot be matched anywhere in the country. Write today. Maine Development Commission, Room 6-B, State House, Augusta, Maine.



(domestic as well as export) for manufacturers. They will be told in what territories, in some cases to what customers, they may sell their goods so that delivery costs and the burden on transport may be reduced.

The Gordon price control administration is coming through soon with the first of the drastic new allocation plans for certain industries. One of the first to come in for the streamlining will be the newsprint industry. Customers (including U. S. publishers) may be shifted from one newsprint mill to another. In the process, some mills may close.

• **May Cover North Shore**—Before the war voluntary prorating of production in the industry for the purpose of giving all units a fair share of the available market did not extend to the customer-owned plants of the McCormick-Patterson interests, although a section of the industry, especially in Quebec, campaigned unsuccessfully to have them included. Now the big Quebec North Shore Paper Co. plant on the lower St. Lawrence which supplies the New York Daily News is at least under consideration in the allocations planning because its shipping involves long water and rail hauls.

To carry out plans for further regimentation of business, Price Chief Donald Gordon is reorganizing his Wartime Prices and Trade Board. It is being split into four main divisions: price fixing and subsidies; supplies, distribution and rationing; simplified practices; research and planning.

• **New Personnel**—The division of supplies, distribution, and rationing will be headed by a Bank of Canada man from the Foreign Exchange Control; N. W. Mackenzie. Another Bank of Canada

expert, James E. Coyne, becomes deputy chairman of WPTB.

The desire to support the government's anti-inflation policy, coupled with fear that their names may be exploited in parliament for political purposes if they accept price ceiling subsidies, is making many Canadian manufacturers reluctant to claim subsidies. To preserve their right to claim subsidies while they determine whether their profit position will permit them to absorb the price squeeze without it, the price control administration is allowing them to submit conditional subsidy claims within the stipulated time limit, subject to withdrawal should they decide when their books are balanced that they can get along without this aid.

• **War Labor**—Although Selective Service Director Little has discovered an acute present and prospective labor shortage for war industry (more than 100,000 new workers will be needed in the next few months) he is handicapped in getting them by Ottawa's reluctance (corresponding to Washington's) seriously to attempt drafting men for war jobs. Canada's industrial manpower policy is adversely affected by the Mackenzie King government's opposition to army conscription for overseas service. Because of the lack of any decisive action on conscription, labor control is coming through in small bits and pieces.

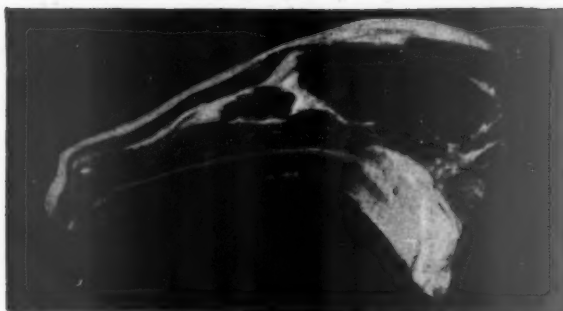
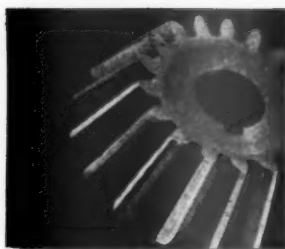
How this piecemeal action slows up effective planning of a long-term labor supply was revealed last week when a decree to control the movement of workers turned out, when released, to be control over employers instead. They were told they could only hire men sent to them or approved by the Selective Service System's local offices.



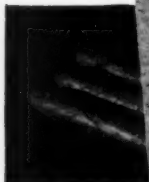
RATION BOOKS DELIVERED

People living in blocks of flats and big housing estates in Lambeth, London, can get their new ration books with-

out calling at the Food Office. The local Food Officer has borrowed the council's mobile information unit to carry books to the people. A loud speaker invites book applications.



Many products now in cartons started in something else



Parts Packages for War Production!

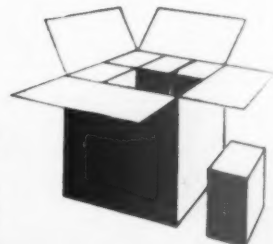
- Our War Packaging Service Departments can be of help in planning parts packages, whether they be for jeeps, airplane motors, tanks, machine guns or any one of the necessities of war.
- The broad experiences we have had in industrial parts packaging in peacetime have given us a firm foundation on which to build the specialized requirements of wartime packaging.
- Our specialized experience in military parts packaging, our knowledge of government needs and specifications, and the fact that we combine nationally, in one organization, the manufacture of folding cartons and corrugated and solid-fibre shipping containers make it possible for us to offer a comprehensive service hard to duplicate.

• • • And many now in other materials will soon be in cartons!

If your product is suffering from curtailment of other packaging materials, we at Container Corporation have more to offer you than a "substitute" package. We'd like to work with you to develop a package that does not need critical materials—and one that will be the best package you have ever put on the market.

Package conversion calls for ideas—and that is the forte of our carton specialists. We have the organization—the whole packaging job, from pulp to finished carton, is under our control. And we have our own experts in every phase of packaging: materials, design, packing procedure, distribution and marketing.

These people are at your service, with a wealth of experience and information. Write or call our nearest office for a consultation.

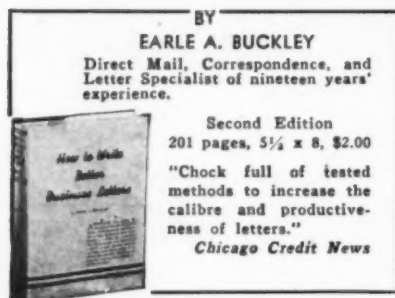


CONTAINER CORPORATION OF AMERICA

General Offices: 111 West Washington Street, Chicago, Ill. . . . New York • Rochester • Natick, Mass. • Philadelphia
Akron • Cincinnati • Cleveland • Circleville • Detroit • Indianapolis • Wabash • Carthage • Anderson, Ind.
Peoria • Rock Island • Minneapolis • Seattle • Wilmington, Del. • Baltimore • St. Louis • Ferdinand • Ft. Worth

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FOLDING CARTONS • BOXBOARDS • CORRUGATED AND SOLID-FIBRE SHIPPING CASES

How to Write Better Business Letters



YOU can make dictation or letter writing an easier job and at the same time make letters do more work, with the aid of this helpful book. In simplest possible manner it shows the essentials of good letter writing and with pointers and examples from the work of successful letter writers shows how to make your own letters more productive. Covers all the regular correspondence needs of business offices, including sales letters.

A practical business manual

The book is one of a series especially planned to help business men with boiled-down, simple treatment of their problems—suitable for the smaller business owner-manager as well as the specialized worker or executive in larger concerns.

Tells how to

- write attention-getting openings
- develop the body of the letter
- write action-compelling closes
- write an adjustment letter
- write an inquiry letter
- write collection letters
- revive inactive customers
- avoid "telegraphic" letters
- make every letter a sales letter, etc.

Make every letter you write a real business-builder

Every letter—of inquiry, proposal, or adjustment—has a job to do. But so routine a part of business is correspondence that the profit possibilities in improving it are often overlooked. Try Buckley's methods in your letters—even a slight increase in efficiency of each one will mean a lot in a month's time.

10 DAYS' TRIAL—SEND COUPON

McGraw-Hill Book Co., 330 W. 42nd St., N.Y.C.
Send me Buckley—How to Write Better Business Letters for 10 days' examination on approval. In 10 days I will send \$2.00 plus few cents postage, or return book postpaid. (We pay postage on orders accompanied by remittance.)

Name

Address

City and State

Position

Company RW-6-27-42

MARKETING

Backyard Boom

Nation goes in for simple life on grand scale, causing a run on barbecue grills, lawn furniture, and croquet sets.

Early reports from department, furniture, and hardware stores indicate that the East Coast is planning a mass return to its own backyard to the tune of millions of dollars worth of barbecue grills, lawn umbrellas, porch swings, croquet sets, and similar devices for whiling away an autoless summer.

● **It's Becoming General**—The backyard boom, notable at first in New York, now is becoming a general phenomenon. It

is reported, in varying degrees, by firms ranging from low- and moderate-priced department and hardware stores to the swankiest specialists in outdoor equipment. It has forged ahead in spite of the nationwide lag in sales that has been evident in retail stores for the past few weeks.

Far out in front of the boom are outdoor barbecue grills and their various accessories. Individual New York stores report that unit sales of these are running from 20% to 50% ahead of last year. Many stores give away or sell a book on outdoor cookery with a purchase of a grill (a quick look around the barbecue department of one store turned up a half dozen different titles on this subject).

● **Obedying an Urge**—Apartment dwellers are not one whit discouraged by their



GLASS PACKS

Indicative of the greatly increased glass pack of fruits and vegetables scheduled this season by many canners is the display of the Del Monte (California Packing Corp.) line in Calpac's "model" grocery in San Francisco. About the middle of July, the company will begin distributing to dealers reproductions of model displays designed to introduce glass-packed products effectively to inquisitive house-

wives. The growing importance of the glass output in the packers' 1942 program is very much in evidence, especially on the West Coast. For instance, problems of handling and selling glass-packed products were a feature of the Business Wartime Clinics for grocers held during May throughout California by the Distributive Division of the State Department of Business Education. One session in San Francisco was addressed by Everett Runyon, advertising manager of Calpac.



"We knocked the hell out of 'em"

"We picked out the biggest ships in sight and laid our bombs in a pattern. Our bombardiers and rear gunners saw direct hits on one cruiser, one transport and possibly a second cruiser."

"They were afraid of our B-17's and wouldn't close in to fight."

"We dropped our bombs and a Zero came after us. We sent him down in flames. Another Zero was below us. . . . We knocked the hell out of 'em."

"There's nothing to the Japs — the B-17 will win this war."

THESE few terse statements echo back in news dispatches from men who helped to win the battle of Midway Island. Glowing with the heat of combat, they tell the story of the courage of our fighting men . . . of their triumph in the air . . . and of the Boeing B-17 Flying Fortresses* that served them so well.

B-17 is the high-flying heavy bomber which the Commanding General of the Army Air Forces has called "the guts and back-bone of our world-wide air offensive . . . without a peer in its field today." It is the long-range flying weapon which has demonstrated time and again that it has the speed, fire power, armament

and altitude necessary to gain the upper hand against all comers in modern aerial warfare.

The men at Boeing who have worked for years designing and perfecting the Flying Fortresses derive great satisfaction from the record of their planes in action. They salute the magnificent record of the crews of the Fortresses, and to them — wherever they are — they send this message: "We are building you the best airplanes we know how to build, and we are building them as fast as possible."

Integrity in engineering design . . . variety in engineering skills . . . long experience in research . . . these are the things which Boeing is building into bombers, trainers and other war planes for our armed forces.

DESIGNERS OF THE FLYING FORTRESS • THE STRATOLINER • PAN AMERICAN CLIPPERS

*THE TERMS "FLYING FORTRESS" AND "STRATOLINER" ARE REGISTERED BOEING TRADE-MARKS

BOEING



"I AM HEAT-FAG. I attack workers who sweat — who lose body salt and then don't replace it. Through fatigue and in-alertness, I make them 'drop their guard' — I not only spawn ... I cause accidents."

Heat-Fag is the all-out, unseen enemy of production. Thousands, yes, millions of precious man-hours can be lost through this insidious force that saps men's strength—lowers their efficiency—wears them down before the shift is over. Salt sweated from the body must be replaced — or Heat-Fag takes its toll.



QUICK DISSOLVING
(less than 30 seconds)
This is how a Morton Salt Tablet looks when magnified. Examine one—see how soft and porous it is inside. When swallowed whole — with a drink of water, they dissolve in less than 30 seconds.

**AVOID HEAT-FAG...USE
MORTON'S
SALT TABLETS**

Wherever workers sweat, Salt Tablets are needed, for they represent the simple, easy way to replace salt that's lost through sweating and hot work.

Case of 9000 16-grain salt tablets, **\$2.60**
Salt-Dextrose Tablets, case of 9000 **\$3.15**

Order from your distributor—or directly from this advertisement.



Place MORTON'S DISPENSERS at all Drinking Fountains

They deliver salt tablets, one at a time, quickly, cleanly — without waste. Sanitary, easily filled, durable. 500-tablet size, **\$3.25**. 1000-tablet size **\$4.00**

MORTON SALT CO., (Salt Tablet Div.) Chicago, Ill.



Your Own Personal Supply of Salt Dextrose Tablets

SEND TODAY — for this unbreakable, screw-cap container holding 100 salt-dextrose tablets. Moisture-proof, handy, convenient. Ideal for home, car, golf bag — or for carrying in your pocket. Only 25c postpaid.

100 TABLETS -- 25¢

EVERYONE WHO SWEATS NEEDS SALT!



limited hold on the great open spaces. Pocket handkerchief terraces are being plowed under for victory gardens, their patriotic appearance toned down with a wrought iron bench or so and a grill big enough for broiling a couple of lamb chops.

One retail specialist in barbecue equipment was momentarily stumped recently when asked for something "we can use on the fire escape." He finally filled the bill with a portable grill retailing for \$2.95. Prices on grills start about there and range up to \$150 and more, complete with warming ovens, fancy tile-work, and whatnot. Such swank stores as New York's Hammacher-Schlemmer, purveyor of appliances, outdoor furniture, hardware, and food delicacies to Manhattan's elite, and W. & J. Sloane, furniture specialists, report that their fastest selling line is around \$49.50. In deference to the trend, Sloane's installed a separate barbecue department for the first time this summer.

• **Upper-Bracket Simplicity** — Other items are moving briskly. Upper crust metropolitanites are returning to the simple life to the tune of a \$300 or \$400 investment in metal garden and terrace furniture, and sets in this price bracket are not lingering in showrooms long enough to gather dust. Stores report sellout of more popularly priced ensembles. Even this early in the season, Sloane's has sold out the entire stock of its lowest-priced rattan set—\$69.50 for three pieces.

A big, medium-priced department store, which reports an excellent business in grills and good sales of all outdoor furniture, has been deluged with calls for lawn (not beach) umbrellas, though it doesn't know why. Backyard games—darts, archery, quoits, ping pong, badminton—are fast movers. Conservative Abercrombie & Fitch reports that sales of such games are "very, very good indeed." Biggest comeback seems to be croquet. Lewis & Conger, which has stocked only a few sets in past years in deference to the remnants of the old carriage trade, has now installed a complete line in response to customer demand.

• **Shortages and Priorities**—Sad part of the story is that even the simple life can be subject to shortages and priorities. Grills take a lot of steel and iron; stores report that some lines already sold out can't be replaced. Production of metal furniture stops dead July 1, and, though most retailers are heavily stocked, they figure they won't have anything left over for next year if the present buying spree continues.

Rattan, another popular material for outdoor furniture, is imported, much of it from Malaya and the Dutch East Indies. Some stores report that it is even harder to come by than metal. One large specialty shop didn't even try to stock it this year.

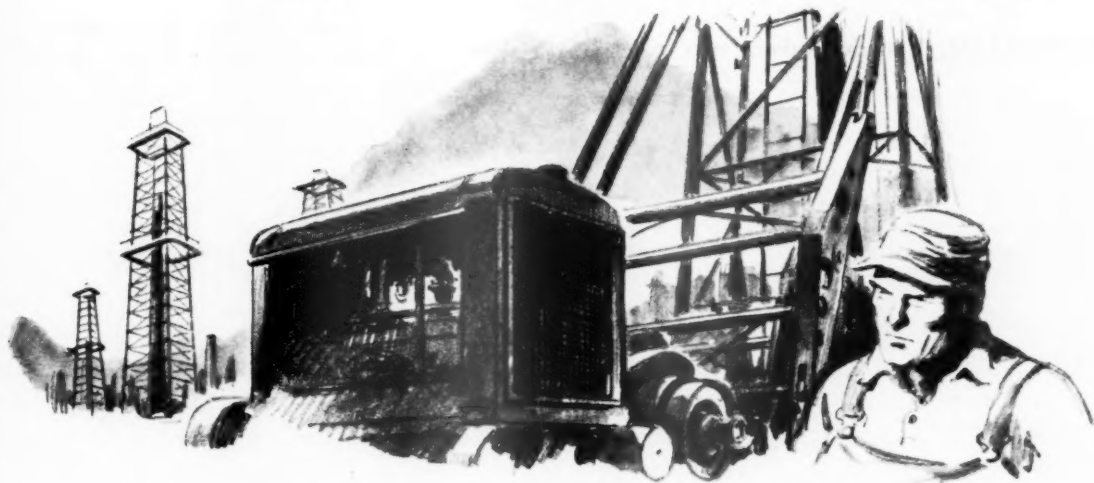
Protecting Our **POWER to WIN!**

The power to strike...at the right time...in the right places...to deliver the crushing blows which will spell VICTORY...is pouring to the battle fronts from the industries of America.

And those industries, converting to their tremendous tasks, are themselves making unprecedented demands on every available source of power to turn the wheels of production. Ranking high among these sources because of their adaptability and mobility, are internal combustion engines.

Thousands upon thousands of such engines are delivering "horse power" where and when it is needed...converting our petroleum resources into the energy that builds munitions...and developing those very resources by drilling new wells and pumping the oil supply!

To sustain this vital flow of power...to avoid production breakdown, Penn engineers have developed automatic controls which help prevent damage to the engines. Easily applied to any internal combustion engine, these Penn "safety" controls will sound a warning alarm...or stop the engine operation...if the cooling water system fails, if the oil line is clogged



or breaks, or if oil pressure drops dangerously low from any cause. Besides preventing damage, these automatic watchmen conserve the engine operator's time...release "man-hours" for other needed tasks.

If you use Diesel, gas or gasoline engines we urge you to write immediately for complete information about this simple, low-cost power insurance...Ask for catalog E100. *Penn Electric Switch Co., Goshen, Ind.*

Penn
CONTROLS

REFRIGERATION, AIR CONDITIONING, ENGINE,

HEATING, PUMPING AND AIR COMPRESSOR

THE QUARTERLY MARKET OUTLOOK--

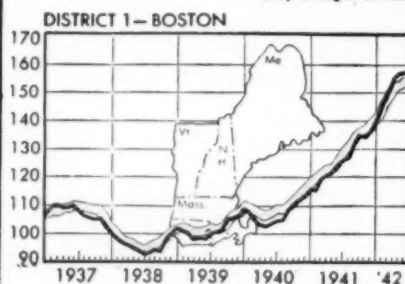
The sales emphasis for the coming quarter still accents those centers of the war effort where converted durable-goods industry, new armament plants, and expanded military training facilities are boosting income payments. And in prospects for sharpest immediate improvement, several such areas as southern Michigan, the Pacific Northwest, eastern Kansas, and Baltimore-Hampton Roads are outstanding.

These will contrast dramatically, of course, with New York City, east Texas, Wyoming-Montana national parks, and such similar sluggish sections, where apparel, petroleum, tourist, and other war-hit activities are apt to be off. And rankings in cotton-textile, bitumi-

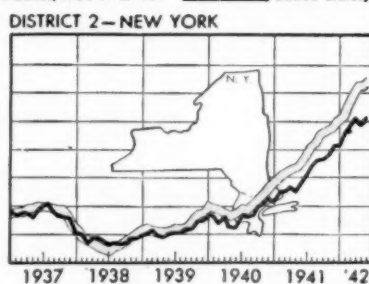
nous coal, steel, and other basic-materials areas—Fall River-New Bedford, southern Illinois-Indiana, Youngstown-Wheeling—will fall in between, since operations have for some time been limited by effective capacity.

In agricultural regions, weather conditions over the coming crucial months of the growing season will go far towards determining cash returns at harvest time. Essentially livestock-producing districts—Kansas City, Chicago, Minneapolis—will tend to be somewhat less vulnerable to crop failures, since feed stocks are large. Sharp price rises over 1941—for hogs, eggs, oil crops, and other essential war products—have been boosting rural market potentials, but with quotations stabilizing

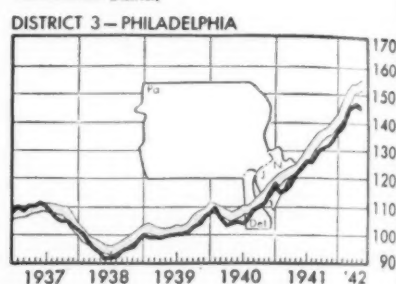
(Key to Regional Income Indexes, 1935-37=100: — United States; — District)



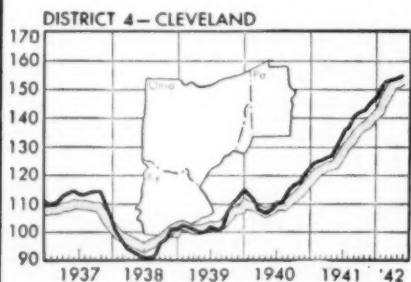
Income continues to expand faster than the nation's. In eastern district industrial areas, effects of declining wool and shoe operations are being offset by armament acceleration at Quincy, Hingham, Lowell, Providence, etc. And payrolls go on soaring in Connecticut, western Massachusetts, and the shipbuilding towns of Maine, as awards for new facilities spread. Metal-working firms—business machines, hardware, clocks, and jewelry—are converting, holding dislocations to a minimum. But prospects in the district's rural areas, mostly in the north, are not overly bright.



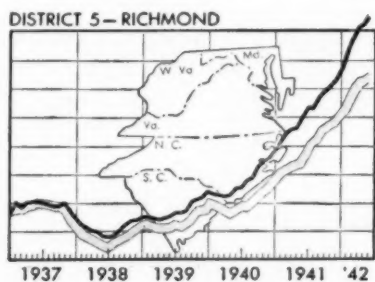
An index to New York City prospects is the current drive for war projects, in order to hold down the city's pool of job-seekers to around 300,000. Threatened apparel-industry dislocations, on top of curtailment in other lines, overshadow the rise in city arms payrolls. In other district industrial areas, however—Bridgeport, Long Island, Newark-Jersey City, and upstate New York—Buffalo, Syracuse, Schenectady—labor shortages impend, due to better-than-average advances in employment. Far receipts have perked up, and gains over the 1941 levels now barely trail the nation's.



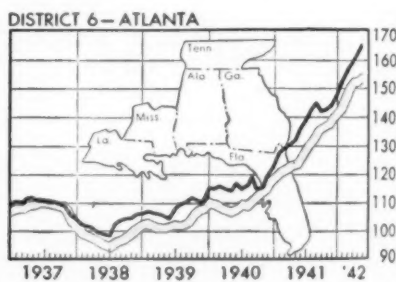
As a result of expanding shipbuilding, ordnance, and aircraft work, factory wages in the Philadelphia industrial area—which comprises nearly half the district population—continue to outstrip the nation's. Arms awards elsewhere have been less concentrated, but major gains are in prospect at Sunbury (machinery), Harrisburg (depots), and Bethlehem (steel). Hazleton, Wilkes-Barre, and other anthracite towns have lagged, but hard-coal output, to replace fuel oil, now is up. Reading (hosiery) and Scranton (textile) payrolls and rural farm receipts are "slow."



With employment in new and converted plants on the upbeat in Cleveland, Cincinnati, and Columbus, and soon to jump in slower-to-pick-up Toledo, Dayton, and Erie, sales prospects here are brightening fast. Except for a few arms towns, payrolls in Youngstown, Wheeling, Pittsburgh steel-coal areas are rising slowly, though steadily, as during the dislocation period (BW—Mar.28'42,p60). In most of Ohio, crop and livestock receipts are up with the nation's, but despite recent war awards, the farm-coal country of southeastern Ohio and eastern Kentucky still lags.



Although the Baltimore-Washington-Hampton Roads section is still far in the forefront of the income parade, war awards here are widening. In the northwest of the district, the Hagerstown, Md., Charleston, W. Va., and Radford-Pulaski, Va., areas are riding high. And in the Carolinas, aside from booming Wilmington and Charleston, air-base construction is mounting and arms-plant contracts are now trickling through. Farm income and growing conditions have been far from spectacular, but plantings are up, and good summer weather will quickly lift rural potentials.



The broadening war stimulus now blankets most areas in this region. Florida soon will be busier catering to troops than formerly to tourists, and trade at the many district cantonment sites runs high. Northern Alabama-southern Tennessee is approaching the peak of its arms boom, but giant new manufacturing works have provided Atlanta and New Orleans with renewed sales impetus. Truck and fruit receipts have been excellent, and livestock return high. But cotton prospects wait on the weather, and with quotations weakening, some areas may not top 1941's bumper income.

-A GUIDE TO REGIONAL SALES TRENDS

now, gains in most farm areas should run closer to average.

And a new regional development is in the making—one which will gather accumulating import. The nation's arms ceiling may be in sight only for 1943, but in such centers as Los Angeles and northern Alabama, plant-concentration is already nearing the saturation point, and payrolls promise to flatten out in months to come, albeit at peak levels. The war arc, on the other hand, is steadily widening, touching off booms in many additional localities. The net result will be a further differentiation in regional prospects for income and sales expansion, beyond that suggested by the latest

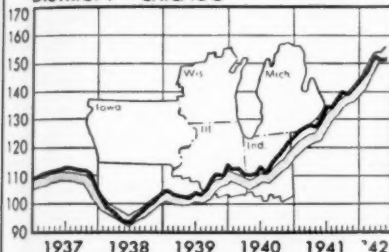
Business Week Regional Income Indexes (May figures preliminary, April revised):

District	May	April	May, 1941
United States	155.6	154.3	127.9
District 1—Boston	157.4	156.9	124.8
District 2—New York	145.8	139.9	118.9
District 3—Philadelphia	145.4	146.9	124.3
District 4—Cleveland	155.4	154.4	131.5
District 5—Richmond	175.2	172.7	140.3
District 6—Atlanta	165.8	162.8	136.4
District 7—Chicago	151.7	151.4	130.1
District 8—St. Louis	165.9	164.3	128.5
District 9—Minneapolis	151.7	153.8	125.2
District 10—Kansas City	144.3	141.7	115.0
District 11—Dallas	162.5	159.8	136.2
District 12—San Francisco	173.9	171.5	134.5

Quarterly district-by-district analyses of regional sales and income prospects follow under the 12 map charts.

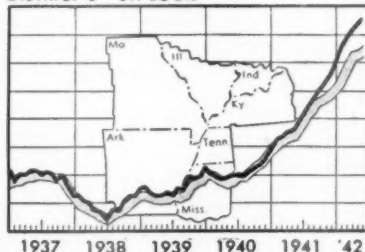
(Key to Regional Income Indexes, 1935-37=100: — United States; — District)

DISTRICT 7—CHICAGO



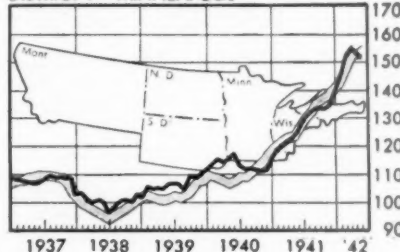
Rural markets, fattened on exceptional beef, pork, and milk income, have outranked those in dislocated Michigan auto and other consumer durable-goods centers over recent months. Chicago and Milwaukee area activity has been better sustained, and payroll gains in Indianapolis and other cities, and in numerous arms towns, have run above the nation's. Now, with farm returns running high, and sharply rising payrolls soon to surpass peacetime peaks, relative district prospects are likely to improve in the coming quarter—notably in the former priorities-struck cities.

DISTRICT 8—ST. LOUIS



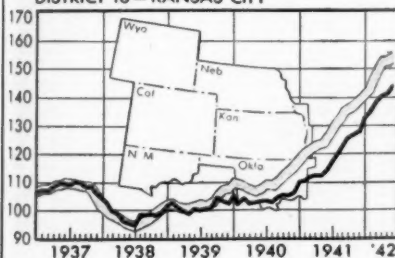
Accelerating war work—around and between St. Louis and Louisville, in western Tennessee, and especially all through Arkansas—continues to boost district income payments. Livestock receipts are steadily advancing in Missouri and southern Illinois. Kentucky tobacco and southern cotton sections still are partially buoyed by exceptional 1941 returns, but 1942 plantings and prices promise less marked advances over last year in autumn harvest income. Thus, district month-to-month gains may return nearer "normal," and urban potentials are apt to outrank rural.

DISTRICT 9—MINNEAPOLIS



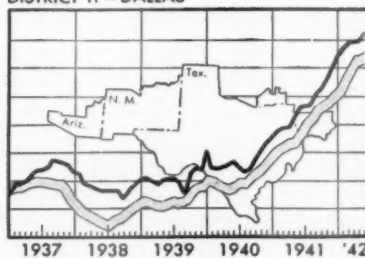
Market prospects now run brightest in eastern sections—in industrial Minneapolis-St. Paul (ordnance), Duluth-Superior (shipbuilding), and on the Mesabi iron range, and in livestock- and dairy-producing central Minnesota and Wisconsin. Even so, the income rise in this region is moderating, due to the low level of war awards elsewhere, and the probable mediocre advance in winter wheat receipts in North Dakota and other western areas over 1941. Right now, pastures are lush and feed-crop plantings are up; but summer weather will prove the key factor in rural sales.

DISTRICT 10—KANSAS CITY



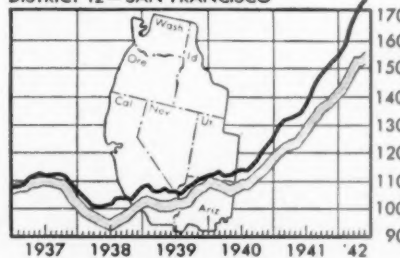
Major plant and military-base projects continue to pour into this region and payrolls are mounting in numerous towns and cities in the eastern tier of district counties, and also in a few in the west. Farm receipts—largely from cattle, hogs, and milk—have kept pace with the nation's, and crop and pasture conditions currently are excellent. Arms "hot spots"—Wichita, Denver, the Kansas City, Tulsa, etc.—outrank most rural market towns, and the war stimulus is the chief reason for anticipating improved district potentials, relative to the national average.

DISTRICT 11—DALLAS



Prospects have declined of late, due to (1) curtailment of oil activity and (2) excess moisture for cotton. Construction has also fallen off, but now, with mounting war activity in the eastern half of the district, and excellent pasture and livestock conditions in the west, income generally is reinforced against any sharp drop. Indeed, with better weather and increased government contracts, this region's outlook could yet outstrip that of most others. In any case, numerous war boom towns—from Amarillo to Texarkana down through the Gulf Coast—will be outstanding.

DISTRICT 12—SAN FRANCISCO



Soaring employment in coast industrial centers still is lifting income indexes here above the nation's. In order, coming gains will be sharpest around Portland, Seattle, San Francisco, and lastly, Los Angeles. Inland, Salt Lake City is outstanding, with other "hot spots" scattered. Agriculturally, California and nearby states have outgained the nation, and fruit and vegetable prospects are good. But there are contrasts in the over-all picture: ranges have not fared too well; Northwest wheat plantings are off; and lumbering and mining activity barely holds steady.



**IS THERE A
5th COLUMNIST
AIR COMPRESSOR
IN YOUR PLANT?**

★ ★ ★
OLD jalopy air compressors are time stealers and power stealers. Too often owners are "used to them" and never stop to think how much time is wasted through breakdowns or waiting for air pressure to build up. As a nation we can't tolerate waste of man hours now. Our freedom depends on production speed! Throw out the time waster and replace it now with a Wayne. It will give you more air at lower power cost . . . and give production a real boost. Ask about the helpful Wayne Auxiliary Unit Plan if you have a good compressor now but need greater air capacity. There's no obligation.

WAYNE
Air
COMPRESSORS



THE WAYNE PUMP CO.
Fort Wayne, Indiana
World's Largest Manufacturer
of Gasoline Pumps

Co-op Label Gains

National Cooperatives, Inc. holds first merchandising clinic as its brands show 84% gain, against 40% in total sales.

If the sales-promotion savvy of consumer cooperatives equalled the members' evangelistic fervor for the movement's social significance, co-op stores might have a lot more customers. Profit-minded business men watching the co-ops recognize a growth tremendous in percentages. Typically, the sales of the consumer co-ops increased in 1941 by 40% over '40. But their 1941 volume at wholesale was only \$82,624,650. This is relatively unimportant, since it includes not only consumer goods but also such high-tonnage farm supplies as fertilizer and stockfeed.

Fair critics hold that the co-ops will remain immature until they learn how to recruit less socially-conscious customers by selling the really substantial

money advantages they have to offer. The members of a well-run co-op can buy high-quality merchandise at locally competitive prices, then get a year-end dividend of their share of the store's profits, technically termed "savings."

● **Concentrating on Merchandising**—A meeting scheduled for next week at Plymouth, Wis., may well mark the commercial coming of age of the co-ops. For the first time in the U. S., leading co-op merchandisers, including staffs of wholesale houses, will gather and spill to one another all that they know of successful sales and advertising. Their aggregate knowledge is plenty, counting in such up-and-coming co-op outfits as the big supermarket at Maynard, Mass. (BW—Mar. 1 '41, p36) and the city-wide co-op that advertises its ability to care for the citizens of Cloquet, Minn., all the way from the cradle to the grave (BW—Apr. 20 '35, p18). A few outstanding retail co-ops will have their managers in attendance at Plymouth, but most of the delegates will probably be executives of the 14 cooperative wholesales in the U. S. and the 2 in Canada.

Each local co-op store is a stockholder.



SMASHING BUSINESS

Ships are launched so fast these days that one of America's largest wineries, the Roma Wine Company, Inc., of Fresno, Calif., has set up a separate department to prepare fancy wrapped bottles of champagne. While the dollar value of the new wine outlet is limited, it is considered good prestige business by the 25 producers of champagne among California's 455 wineries. Daily launchings of freighters,

small patrol craft, submarines, and larger naval vessels are bringing orders in 100 lots. It takes five hours of an expert wrapper's time to dress fully a single champagne bottle. The "tuxedo" consists of a $\frac{1}{8}$ -in. flexible mesh holding jacket that keeps the glass from flying, and double 60-ft. tri-colored special bunting that holds its shape after the bottle is smashed. Usually the smashed bottle with its bunting is stored aboard the ship for good luck after a launching.

member-customer of the wholesale that operates in its territory. Conspicuously successful as merchandisers of goods equally serviceable in town or on the farm are the wholesales at Brooklyn, N. Y.; Columbus, Ohio; Superior, Wis.; Minneapolis, Minn.; and North Kansas City, Mo.—though some of the others roll up more impressive sales totals by intensive attention to big-volume products for farm use. Only six wholesales—Brooklyn, Chicago, Kansas City, Minneapolis, Superior and Oakland, Calif.—handle groceries, and their total grocery volume is pushing around the \$6,000,000 figure.

• **Pushing the Private Brand**—The wholesalers distribute regular national brands, but each of them also distributes private brands, commonly identified by the "Co-op" label. Tying the wholesales together is National Cooperatives, Inc., an outfit which a profit-motive business man would call a joint buying agency, but which cooperators prefer to term a "merchandise-selection body." Items that lend themselves to national distribution are bought through National Cooperatives' master contracts, while items better suited to regional distribution are bought by the individual wholesales. National Cooperatives is staging the Plymouth clinic.

Backbone of National Cooperatives is its control of "Co-op" as the brand name of all merchandise items that it handles for the regional wholesales. To most city fellers, except in a relatively few urban residential neighborhoods where retail cooperative outlets have recently been fighting for footholds, Co-op Brand is a total stranger to the consumer. But to thousands of country-town merchants, Co-op Brand is the No. 1 rival in tires, groceries, electrical appliances, and drug sundries.

• **Sales Secrets**—National Cooperatives jealously guards dollar volume figures, but it scored a whacking 84% gain last year. Since consumer co-ops' total business was only \$82,000,000 last year, and since private brand sales never constitute more than a small fraction of a retail store's aggregate volume, it's a fair bet that National Cooperatives still has a long way to go before it counts its sales in the tens of millions.

In 1941, tires and tubes represented 59% of National Cooperatives' total volume. Other automotive items made up 13%. Drugs and groceries were 19%, electrical appliances and building supplies totaled 9%. Since its automotive volume shrank with tire sales restrictions, National Cooperatives has been trying to regain some of its volume losses by plugging relatively plentiful items.

Thus the grocery department in 1942 automatically became the main department. National Cooperatives asserts that it is ready to receive proposals to handle any kind of merchandise, and is

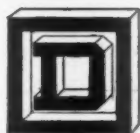
Eyes in the Night-

SOME people might call night flying "blind flying."

But to Airline pilots it is flying with eyes that see through night as well as shining day.

These eyes are radio and precision instruments — sensitive altimeters, direction indicators, vertical and air-speed indicators, to name a few.

Such precision instruments are Kollsman's contribution to the safe, dependable operation of the nation's scheduled Airlines . . . the efficient Air Transport system that weaves the entire nation into a neighborhood—and speeds precious war-production man-power and cargo to destination in a matter of hours . . . not days or weeks.



The Square D Company manufactures Safety Switches, Electrical Motor Controls, Circuit Breakers, Switchboards, Pressure Switches, Panelboards, Multi-breakers, Welding Controls and Kollsman Aircraft Instruments.



2³/₈ Ounces of Metal

THAT MAKES A WARPLANE'S HEART BEAT



Tough Problem + Stainless Steel = Product Improvement

Handling high octane aviation gasoline—a corrosion problem if there ever was one—is the job of these *Stainless Steel* parts for a modern aircraft carburetor.

If, for a single instant, either the small needle valve or float should fail to function smoothly . . . the lives of American boys, and thousands of dollars worth of warplane, would be endangered. That's why *Stainless Steel* is used—to keep many precision aircraft carburetor parts free from corrosion that could cause "sticking".

And the fabricator of parts like these has good reason to use *Carpenter Stainless*. The problem of machining these vital parts was made easier by Carpenter's original development of *Free-Machining Stainless Steel*.

Every day, *Carpenter Stainless* is helping to make more planes, tanks and ships. And every day, Carpenter service men and metallurgists are helping to overcome difficult wartime production problems. If you could use some of this problem-solving help, let us know.

THE CARPENTER STEEL COMPANY, READING, PA.

Carpenter
STAINLESS STEELS



BRANCHES AT Chicago, Cleveland, Detroit, Hartford,
St. Louis, Indianapolis, New York, Philadelphia

...far
Strength
Rigidity
Heat Resistance
Corrosion Resistance
Longer Product Life
Sales Appeal

aggressively laying plans to expand into new lines and to take on new suppliers immediately after the war. Instance: They are closely following experiments on pre-fabricated homes as a promising postwar line.

• **Emphasis on Values**—Co-op merchandisers staunchly believe that their current bulge in sales of many articles comes from extra quality and generous value. Beyond all question, National Cooperatives and the regional wholesales are more than commercially insistent on obtaining high quality stuff for their members. At the same time, they smartly hold down prices.

Good example of how a co-op operates is Eastern Cooperative Wholesale, Brooklyn. Eastern recommends resale prices to its retailer member-customers. These are set at levels prevailing on comparable or slightly lower qualities in the supermarkets of the leading chains against which they must compete. Eastern takes for its norms the prices of First National in most of New England, of Safeway in and around Washington, of A&P pretty much everywhere else in its region. For other items, its recommended prices are set so that they are strictly competitive with the retail stores of Sears, Roebuck & Co. Specialty items, however, are not priced in relation to the competition or in terms of what the market will bear but rather in terms of straight production costs.

As a result Eastern has developed disproportionately large volume in some of its individual items. Its tree-ripened Elberta peaches (Co-op brand, of course) have more than local fame. These constitute the wholesale's biggest-selling canned fruit item; they even outsell yellow cling peaches, choice quality, which are the staple item in most stores catering to anything short of the carriage trade.

• **Co-op Specialties**—Co-op merchandisers say they get a far better break than independents or chains on the notoriously narrow-margin items such as soap and breakfast foods. In the New York City area, for instance, aggressive chains habitually retail many of the nationally advertised soaps at 2% above the carload cost. Co-op brand soaps come from one of the largest manufacturers, are made to specifications which National Cooperative buyers assert are far higher than are common in most of the same firm's own national brands.

Eastern's recommended retail prices on Co-op brand soaps are low enough so that its sales of this line continue to grow more rapidly than most of its other major lines. Yet, until soap margins recently got squeezed between rising costs of raw materials and OPA price ceilings (page 17), the recommended prices yielded a margin of 20%. This juicy percentage made soap the biggest producer of dollar margins in the retail co-ops' stocks. Practically the same story

could be told of Co-op cereals, with the single major difference that these originate not with one of the breakfast food makers that distribute nationally advertised brands but rather with relatively small mills.

• **No National Advertising**—The co-ops are, of course, dead set against national advertising. They ascribe their soap, cereal, and gelatine profit advantages to the money saved by distributing these items without advertising cost. Whatever the cause, the extra margin is a life-saver for the local co-op retail stores.

Most closely guarded secret of National Cooperatives and of the regional wholesales—as it is with all private-brand distributors—is the identity of any manufacturer who makes their brands. The most detailed information ever released by National Cooperatives is that in 1941 it had 74 sources of supply and in 1942 has added 15 more sources. Manufacturers prefer secrecy, lest profit-motive customers kick them downstairs for selling to the co-ops.

• **Selling Product, Not Maker**—The co-ops are equally eager to keep the source quiet. They do not want to be tied to any given supplier, as they might be if consumers associated the product with the maker instead of with the distributor. Also, the tacticians of the movement feel that their position would be weakened if they were to sell their goods on the reputation of an advertising manufacturer rather than on the intrinsic merit of the item, backed up by Co-op brand standing.

Co-op leaders disclaim all suggestions that the more recent growth of their societies stems importantly from the upward movement of prices, though they admit they have been using this as a sales argument on prospective members. They assert, in the absence of statistics, that for each member thus recruited, they have obtained dozens whose motives were a profound belief in the principles of cooperation or a taste for Co-op canned foods.

• **Figures But Few Facts**—Statistics are not really the forte of the cooperative groups, except those figures showing annual growth. The 14 U. S. wholesales served in 1941 just over 2,000 local outlets, and the two Canadian wholesales served 478. The 16 wholesales had, through the local units, 755,000 members and served 1,500,000 customers, both figures estimates which cooperators say are super-conservative. Just how many of the 2,500 outlets handle which Co-op brands is anybody's guess. Some are general stores, or grocery stores; others are filling stations or local buying groups. Some of the wholesales, such as those at Minneapolis and North Kansas City, bear down particularly hard on automotive fuel and service station outlets. Others, like those at Columbus and Indianapolis, are especially adept at selling fertilizer and stockfeed.

They waited 17 years to Blast Out a Fire!



1 A PUBLIC UTILITY installed a Kidde Fire Extinguishing System to protect a large generator in one of their sub-stations. It was the first electrical extinguishing system designed by Walter Kidde & Company engineers.



2 17 YEARS after installation, an electrical fault developed in the generator. Fire blazed up.

3 INSTANTLY, THE KIDDE SYSTEM was thrown into action. A "bank" of cylinders released a cloud of Kidde carbon dioxide. This fire-enveloping snow-and-gas flooded the generator, reached into every crevice. In a few seconds, it smothered the blaze. For half an hour, as the generator ran down, it controlled "after-glow", prevented re-ignition. Result: damage confined to the original break, weeks of repair time saved!



HAVE you electrical equipment or flammable liquids in your plant? Guard these fire hazards with the speedy, flame-killing power of Kidde carbon dioxide—the gas that harms nothing but fire!

Kidde portable extinguishers

range from a two-pound, pistol-type unit to wheeled types containing 100 pounds of carbon dioxide. Built-in types may be manually or automatically operated; may protect a single spot or an entire process room. Write us for complete details.

Kidde



Walter Kidde & Company
Incorporated
624 West St., Bloomfield, N. J.

CHECK LIST No. 35

... of recent discoveries
for solving war-time problems

- **Joint Seal Resistant** to benzol, gasoline, diesel oil, butane, propane, pentane, etc. (119)*
- **Temporary Binder** for abrasive wheels volatilizes on firing. (141)*
- **Thermosetting Cements** for lamp and radio tube bases. (164)*
- **Lubricating Compound** for drawing aluminum. (139)*
- **Synthetic Oils** dispersible in water containing no soap or added emulsifiers. (121)*
- **Wax** which dissolves in hot water. (135)*
- **Water Soluble Material** gives a soft, flexible, transparent film on paper, textiles, wood, etc. (112)*
- **Rust Prevention**, lubrication and bright annealing of nickel alloy stampings are obtained by the application of a solution of synthetic wax. (157)*
- **Urea Formaldehyde Resins** are plasticized and lubricated by new water dispersible wax. (165)*
- **Ointments and Salves** that are non-staining. (134)*
- **Rubber Goods** finish of high lustre and flexibility resistant to gasoline. (129)*
- **Olive Oil Substitute** for textile and other technical lubrication (128)*
- **Flatting Agent** for Paints and varnishes that eliminates grinding. (125)*

* JUST DO THIS:

See number in parenthesis after each subject. Jot down and mail to us any number that interests you. We will send you data sheets about the chemicals and their uses. Answers to many other problems in your industry are given in our 112-page manual "Chemicals by Glyco"—which is yours for the asking.

GLYCO PRODUCTS COMPANY, INC.
230 King St., Dept. B.W. 3, Brooklyn, N. Y.

Cars on the Skids

Sales of both new and used autos reach new lows and more dealers give up. Parts market, however, is fairly steady.

Automobile sales, both new and used, are on the toboggan. The mortality rate of dealerships rose during May and early June. Such were the reports to the factories, which had expected nothing better as an outgrowth of gasoline rationing superimposed on the problems created by tire rationing.

• **Quotas and Sales**—The Office of Price Administration modestly liberalized its June allotments, not only permitting sale of 40,000 cars subdivided by states, and of 5,000 in a national reserve pool, but also sale of whatever carryover might develop from May. None but hardy optimists in autodom expected current volume to reach those figures.

The only flurry of really cheering activity to the dealers came between Apr. 28, date of the first liberalizing of rationing, and early May, when gas rationing was announced for the East and promised for the rest of the country. In that scant fortnight, dealers saw a ray of hope. Now they have none, and the marginal operators, fence-sitters on close-down decisions until then, decided to quit until the end of the war. Their judgment may prove both good and bad, say factory men—good, because they are unable to maintain themselves; bad because, if they had stayed on and let others close, they would have constituted a segment of the narrowed group which now will divide the existing service business.

• **Used-Car Prices Soft**—As a natural outgrowth of the gasoline restriction on driving, used cars were less in demand.

Second-hand lot prices, none too firm since spring buying failed to materialize in normal volume, were slipping at all points. Would-be sellers found offers lowering and sometimes nonexistent. In the Detroit area many lots were being slowly emptied, then shut down altogether.

Dealers evidenced only a flicker of interest in a suggestion by Auto Rationer Rolf Nugent to sell cars now, on payments to begin at once, for delivery after the war. They said little public interest could be expected.

• **One Ripple of Selling**—The only active car market in the country developed in Michigan during May, when General Finance Corp. took newspaper space in Detroit to advertise that nine tires would be furnished with every used car sold. Against a previous daily average of six sales, this company made 66 deliveries the day after the ad appeared. Other companies followed suit, offering six tires, and did business in gradually diminishing volume. The extra tires, all fair-grade used casings, were stored by the far-sighted sellers as soon as restrictions were announced for new tire sales.

Increasing public apprehension over what will happen to driving habits is reflected in the service shops as well as the showrooms. Repair orders are reported steadily declining. The garage-men say that car owners facing an imminent prospect of car layup under gas rationing will not make repairs which can be put off.

• **Parts Sales Fairly Good**—Parts sales, however, are fairly good—a situation which does not jibe with the lessened repair work and brings no logical explanation except one that many dealers are doing repair work on Army vehicles which require considerable replacement work. More easily explained is a slump in sales of accessories, and reports reach Detroit of price-cutting on such "extras," notably car radios.



CONVERSION FOR FUN

Auto dealers seeking duration conversions are not overlooking the possibilities of recreational centers for which their salesrooms are often well-

adapted. Ready for business (after three weeks of converting) is a 16-alley bowling center, once a used-car floor of one of the largest Chevrolet dealerships in the Middle West—Scott-Puffer-Wahle Co., Topeka, Kansas.

ENGINEER MCKENNA* IS IN A DILEMMA

He's spent three weeks
designing a substation, and
now he's afraid he didn't
make sufficient allowance
for
future expansion

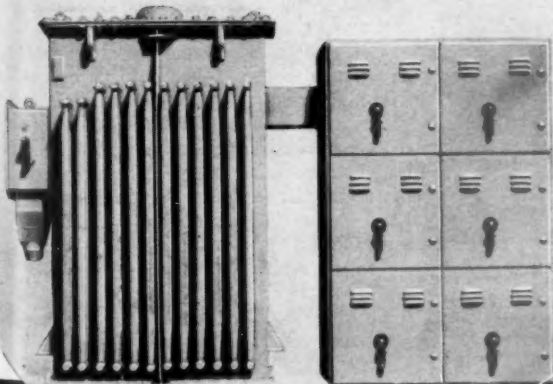


*Any similarity to any-
body is entirely accidental

ACTUALLY that furrowed brow and those hours of mental gymnastics are quite pointless because the solution's so simple. Mr. McKenna, we suggest you follow these simple steps:

1. Place all your drawings in a neat pile, fold once across the middle, and send to your local scrap-salvage organization.
2. Take an hour or two to specify *standard* G-E unit substations—which can be installed **WHEN** and **WHERE** needed. Presto! Your problem's licked!

Safety-metal-enclosed G-E unit substations consist of metal-clad primary gear, a noninflammable Pyranol transformer, and a low-voltage-feeder section with drawout air circuit breakers. Designed for serving loads 600 volts and below from incoming, high-voltage lines up to 13.2 kv, they can be quickly and easily installed near electrical load centers without expensive vault construction.

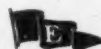


Sounds almost too easy, doesn't it; but see how logical this "packaged unit" idea is. For example, back in September, Engineer McKenna bought a new car—the last one he'll be able to get for the well-known duration. Even so, he was perfectly content to walk into the showroom, select a model, and drive it away. If he'd tried to "design" it himself, he wouldn't have received delivery yet.

The same story of much quicker deliveries, lower cost, and a better, properly co-ordinated, "packaged" unit holds true for factory-assembled, standard unit substations. By specifying these standard units you save weeks of time formerly spent over the drawing board and in long, drawn-out correspondence. You avail yourself of the time-saving economies of efficient mass production. Over all, you save *one to six months* over the old-style method. Your local G-E representative will be glad to work with you.

LOAD-CENTER POWER DISTRIBUTION

In the load-center system—the *modern* method of distributing electric power—unit substations are the basic element. Power is distributed at relatively high voltage (2.4 to 13.2 kv) to these unit substations located near load centers. There it is stepped down to utilization voltage (below 600 volts) and distributed to the load via short secondary feeders—eliminating long, heavy, low-voltage feeders from a distant substation. You save tons of copper and steel, and the performance of motors, lamps, etc. is improved because of the reduction in voltage drop. *General Electric, Schenectady, N. Y.*



General Electric and its employees
are proud of the Navy award of
Excellence made to its Erie Works for
the manufacture of naval ordnance.

GENERAL  ELECTRIC

LABOR & MANAGEMENT

Calling All Men

Warner & Swasey, finding that trainees with experience aren't available, lets down the bars—and does right well.

Any machine hand knows that Warner & Swasey Co. of Cleveland builds turret lathes. A little-known part of the process, however, is constant training of specially skilled workmen.

This company has been training machinists' apprentices for nearly 60 years. Its regular method is to take promising young graduates from secondary machine-shop courses, give them four years of individualized shop and tool-room schooling, and finally present them with company diplomas.

• **Reservoir Runs Dry**—Last October the Cleveland reservoir of school-trained recruits for apprenticeship training, for "learner" machine hands, for semi-skilled factory jobs of all kinds, had been pumped dry by the armament boom. Along with other expanding war producers, W. & S. decided it would have to broaden the base of its labor intake—would have to try salesmen, clerks, elevator operators, dental technicians, and others who never before had seen inside a machine shop.

After several weeks of intensive preparation by Warren J. Henderson, director of personnel, the company opened a basic training school for raw recruits last Nov. 10. Paul Haar, a tool maker graduate of W. & S. apprentice training in 1927, was chosen to direct the primary training program. Henderson, Haar, and their assistants laid out a six weeks' course of instruction, wrote text books covering shop mathematics, made blue prints and supplied measuring devices, had a dozen old machine tools rebuilt for trainees' shop practice, and opened school with a beginners' class of six men.

• **Tests of Aptitude**—The six beginners are hired, like any other employees, through the personnel department. In pre-hiring interviews, they received a simple test in mechanical dexterity (timed assembly of various bolts and nuts with an assortment of tools) and question-and-answer tests.

The school gradually stepped up its intake to starting classes of 32 men each. The school operates 24 hours a day in three shifts, and a new class begins the six weeks' course every two weeks. To date about 200 trainees—roughly 5% of the total payroll—have been graduated into "learner" jobs without diplomas

or other fuss and feathers, and another 60 have been transferred to main plant assembly lines.

• **How Men Are Handled**—As a learner assigned to machine production, the trainee goes into the plant to receive special instruction and supervision from assistant foremen and setup men until he gets the feel of the job, and can swing it alone.

Although the method is easy and informal, the schooling is no snap course. It starts with blue-print reading, and proceeds with measuring instruments, math problems, home study, and shop practice. Machine tools used are: one planer with a small shaper in a collaborating setup, two milling machines, three drill presses, two grinders, two turret lathes and one engine lathe.

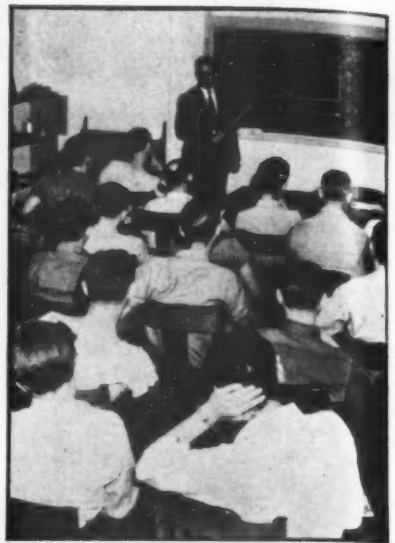
• **Learning by Making**—Trainees begin by producing useful pieces—pins, screws, brackets—their very first day in the shop. After two weeks those judged more useful in assembly than on machines are transferred into the main plant. The others get machine assignments that last the remaining four weeks.

Although trainees begin at once on useful production, although average tolerances are .0005 of an inch, scrap produced because of faulty work is figured at less than 7%. This is achieved by extremely close supervision. In surveys taken after trainees had completed their six-week course and spent two months in the plant, the new men were found to be operating at 90% of plant production standards.

School records show that about one-sixth of the men enrolled in the school



Instructor Charles Brandich, center, introduces two trainees (one of them used to drive a bakery truck, and the other worked in a grocery warehouse) to a turret lathe.



Future machine hands are initiated into the mysteries of shop mathematics in Warner & Swasey's school for inexperienced trainees.

quit or have been dropped before the end of their course. Of those that finished, 90% are still with the company.

• **Some Case Histories**—From the file of successful trainees' individual records three case histories:

A—Age 23. Five years' work experience as laborer in a steel mill. Finished second year high school. Had never worked in a machine shop before, although he had taken a course in mechanical drawing. At end of first two weeks, he was picked out as an especially valuable man and trained for an assistant's job in the tool room, with special assignments to engine lathe, milling machine and planer. Four months after he finished training, he was classified "semi-skilled" and paid accordingly. Considered one of the school's best trainees.

B—High school graduate, age 29. Spent last 10 years in printing, engraving, and photography trades. After no better than a "fair" start, he ended school with grades averaging above 90. Assigned to turret lathe after first two weeks. Now has turret lathe job in main plant.

C—Landscape gardener of 10 years' experience, age 31. Preliminary exams in mathematics and measurements placed him as one of the low students in mechanical intelligence. After the first two weeks he stood at the head of his class, although his previous education was no better than second year high school.

"Most ambitious man we've ever had," said Haar of the ex-gardener.

• **Those Who Do the Best**—So far this company has no women production workers. Its trainees are taken from the age group 18 to 49, with the best mate-

rial, other factors being equal, found among married men of 25 to 35.

Tests given Warner & Swasey applicants, and used with individual variations by a dozen other personnel departments around Cleveland, were developed by Joseph S. Kopas, associate professor of guidance at Fenn College. Arranged on easily handled boards, they dispense with paper work. Instead of writing an answer to each question—the longest test has 64 questions—the applicant turns a little pointer to select one choice from two, three or four possible replies. Individual scores are calculated from the reverse side (closed to the applicant) where dots and other guides point up favorable and unfavorable indicators. Kopas assembles glassed-in board frames and dial indicators in the basement of his home, and sells them for \$35 a board—\$250 for a set of six tests.

• **Tests' Applicability**—While the company considers these tests useful in the process of selecting new employees, their value in choosing experienced men for up-grading (advancement) has been even more pronounced.

Kopas' tests are designed to get the answers to the following questions and get them in a strictly impersonal way: Can he learn to operate a machine easily and quickly? Can he think in mechanical terms? Will he be able to read route tickets and do simple arithmetic calculations and read instruments? Will the other workers get along and cooperate with him? Will he like factory work? Does he have hand-and-finger manipulative ability?

U. S. Breaks Strike

No bayonets are used, but Arkwright crisis gives NWLB a bad headache with problems that just aren't in the book.

As the Arkwright Corp. in Fall River, Mass., went back into full production this week, the federal government was credited with breaking its first strike since Pearl Harbor. A large part of the company's output is mosquito netting, important to armies in the tropics.

The last time Washington acted as strike-breaker, it put Army bayonets behind its "back-to-work" order in the North American Aviation strike, which held up the national defense program in 1941 (BW—Jun. 14 '41, p. 14).

• **Little Drama**—The Fall River tie-up, however, ended with little drama. Some 125 loom fixers and changers, members of an independent union, went back to their machines (after being out two weeks) when it became apparent that neither the government nor the com-



An Important War Time Suggestion To COAL USERS—Commercial and Domestic

Buy and store all the coal you can during the next two months. It's a patriotic duty that will help America's war effort and at the same time insure your home comfort and the continuation of your business next winter.

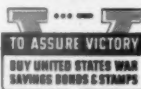
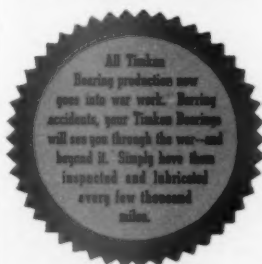
There's no coal shortage now. Using modern Timken Bearing Equipped mine cars, locomotives, loaders, conveyors, hoists and tipples, the mines are producing more than ever before. The problem is going to be one of transportation—getting the coal from the mines to you.

Production of war materials is increasing and the railroads will have all they possibly can handle by fall. If everyone puts off buying their winter coal until fall, the already overburdened railroads will be faced with another terrific task—and war transportation must come first.

So give the railroads a chance in this crucial war year. Fill your bins and cellars with sufficient coal to last through next winter at least. And order now.

THE TIMKEN ROLLER BEARING COMPANY, CANTON, OHIO

TO AUTOMOBILE OWNERS



TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.
TAPERED ROLLER BEARINGS



*How did PT boats get that way?

In both armament and power PT boats pack a punch. Yet, built more like an airplane than a warship, these mighty featherweights of the fleet go forth unarmored...depend for protection on speed!

How did PT boats get that way? Ask builders of famous racing hydroplanes. Or men who make cars and planes. Many a secret they could divulge about the PT boat's powerful light-weight motors... smooth-molded plywood superstructure... and the complicated system of girders that strengthens her streamlined hull.

But no secret are the rustless "precision-straight" propeller shafts that transform her *Power* into *Speed*. America's fastest racers for years have driven through shafts of the tough, corrosion-resistant "sea-goin' metal"... Monel!

Even stronger and stiffer than Monel, yet equally resistant to salt water

corrosion is the newer alloy, "K" Monel. Developed for such peacetime applications as rotary pump shafts and other highly-stressed parts, and now used for shafts in PT boats, "K" Monel through heat treatment gains the strength and hardness of alloy steel...well able to take the terrific wrenching and strain of hairpin twists and turns at express speed. No shaft trouble for PT boats equipped with "K" Monel!

Because of this and similar achievements with other INCO Nickel Alloys, these metals are assigned to many important roles in our all-out war effort, and are no longer available for propeller shafts or other peacetime uses.

THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street New York, N. Y.

*This information published by permission of Navy Department.

pany could be budged from considering the strike "illegal, disloyal, and dishonorable."

The power of the strikers to keep production curtailed in the plant, which employs close to 900, was largely curtailed by C.I.O.'s United Textile Workers. In response to a request from the National War Labor Board, that union ordered Arkwright loom tenders and weavers, who are U.T.W. members, to ignore the strikers and keep their looms going by any makeshift possible.

• **90% of Capacity**—The U.T.W. action pushed up production at the struck plant from almost zero to 90% of capacity, and the strike fizzled as a result. Before calling on U.T.W. to help, Washington had tried, without avail, a number of devices to get the plant back in operation.

Although U.T.W. has been certified as the bargaining agency for Arkwright employees, the American Federation of Textile Operatives functions in the plant and will not give up its claim to represent the highly skilled fixers and changers. It was this independent union which struck, demanding a \$3.50 a day raise.

• **NWLB's Telegram**—When the strike was called and A.F.T.O. leaders turned a deaf ear to NWLB pleas to return to work and arbitrate, the board, using some of the strongest language it has ever put into a telegram, wired the strikers that "as a small group of selfish and willful workers" they were "flouting" the national interest.

The U. S. Employment Service office in Fall River was ordered to hire replacements to take the vacant posts of the strikers. However, the office was unable to find more than six qualified workmen who were willing to take the jobs. Reasons adduced to explain USES's failure to break the strike include the fact that the craft requires a 13-year apprenticeship; that public opinion in Fall River supported the strikers in the face of Washington condemnation; and that A.F.T.O. president, 84-year-old James Tansey, is so popular in town that the principal square is called Tansey Square.

• **Trip to Washington**—Washington representatives visited the octogenarian Tansey, found it impossible to change his mind about the justice of the strike. Feeling that pressure could be applied more effectively in the capital, government men convinced Tansey and Joseph Ainsworth, 72-year-old A.F.T.O. secretary, that it was their patriotic duty to journey to Washington and talk the matter over with NWLB. Before the government men left Fall River, they arranged airline space for the two oldsters.

Next day NWLB agents waited impatiently in Washington for Tansey and Ainsworth to appear. When it became obvious that the two were not on any

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southbound planes, and interstate telephoning failed to locate them on a train, or in Fall River, NWLB officials thought the union heads were lost. In their own good time, however, they turned up in the capital, explained that they had come by bus, and that there had been some mixup in New York.

• **And Then the Take-Over**—After some earnest talking, Tansey and Ainsworth agreed to advise their members to go back to work. Back in Fall River, however, the two union chiefs did not get the men back to work. Then NWLB directed the company to open the plant and use whomever USES could send. A "work or fight" order was considered, but NWLB rejected the idea when it became known that most of the strikers were of Tansey's generation.

USES replacements, as explained, weren't of much value, and the C.I.O. union was called on to take over. That broke the strike, but the wage question is still before NWLB.

Chrysler Impasse

Work continues without a wage pact after negotiations bog down. Conciliator Dewey arrives to seek basis for accord.

Hourly-paid employees of Chrysler Corp. were working this week without a wage agreement while Federal Mediator James Dewey attempted to bring company and United Automobile Workers' Union officials together to patch up broken-off negotiations over pay rates. The negotiations bogged down abruptly after three meetings which had been scheduled to find a successor to a year-old supplemental wage agreement which expired June 1.

• **Opposed Viewpoints**—At the time of the break-off, the company declared that union negotiators had walked out after delivering an ultimatum that their points had to be granted. Assistant Director Morris Field of the union's Chrysler department stated that the company had refused to consider any of the points.

On June 8, the union submitted ten demands on wages as subject matter for a new wage agreement, and three others dealing with changes in the main body of the contract, which does not expire until Nov. 29, 1942. Sideliners immediately assumed that Chrysler would not discuss the three additional points, due to the existence of the contract, and this proved true.

• **Union's Demands**—The ten wage demands were headed by the \$1-a-day pay increase which has been standard in this year's negotiations in the automotive industry, having already been demanded of General Motors and Ford.

Other points included demands for



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BEFORE a single plane can fly, a ship can sail, a gun can fire — before a tank can rumble into action, or a bomb can drop — countless wheels must turn on production lines. Offensive action on the fighting front depends on turning wheels on the production front — on power transmission that puts all the power into the job — increases production and conserves vital power resources.

Dodge Power Transmission Equipment — "D-V" Drives — clutches — pulleys — bearings — in modern group installations or individual drives do double duty — they stand guard against power waste by frugal use — by full delivery. By the same

token they increase production — getting all the power into productive action. Dodge offers a complete line of power transmission equipment — obtainable through distributors located in all vital industrial areas throughout the country. You can depend on Dodge for "The Right Drive for Every Job" and you can depend on the durability of Dodge equipment. Dodge installations are adaptable to quick changes in your production plans, they are a long-time investment. Now dedicated to winning the war — they will be no less vital to civilian production after the peace.

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who talked back
to this ad...



AD: Hey there! It's necessary to take better care of your rope. The longer it lasts, the more rope the Army and Navy will have.

READER: MY rope! I haven't handled a piece of rope since grandpa sold the old gray mare.

AD: Well, I just thought you might run a factory, or a hardware store, or a farm... We'd like *everybody* to know about rope conservation... You can see how vital rope is to ships, armies, transportation, farming, and war plants, can't you?

READER: Sure, but I'll bet our plant doesn't use a thousand feet of rope a year... I don't see how I...

AD: And if you check your loading dock, your trucks, your plant operations, you'd probably be surprised at the rope you do use.

READER: Hm-m-m, perhaps you're right. After all, it won't hurt to investigate our rope-saving possibilities.

AD: It won't hurt to remind all your workers that if every piece of rope is made to last only 10% longer, then we

add more than 15,000,000 pounds a year to our country's fiber stockpile.

READER: But how can we save rope?

AD: First you write Plymouth for some rope booklets called—"Making Rope Last Longer." It shows workers how to save rope by better care and handling. Then you—

READER: Just because you're an ad, you don't have to spell *everything* out for me. All I need now is the address of your company.

AD: Thank you, sir. Write today to the Plymouth Cordage Company, North Plymouth, Massachusetts, or Welland, Ontario, Canada. You'll get everything, including a new War Service Book that shows where you can use "Wartime" Rope* instead of Ship Brand Manila on lots of jobs.

★ ★ ★

* "Wartime" Rope is a non-Manila rope, made of best available fibers. Plymouth's famous Ship Brand Manila Rope is confined to vital war uses by Government regulation.

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abolition of wage differentials for similar work in Chrysler plants; a \$1-an-hour pay minimum; increases for tool and die makers and maintenance men; no wage freezing; equal pay for men and women; and rates equal to those paid by any competitive plant in the area where the Chrysler plant is located.

• **Washington Interest**—As soon as word of the breakdown in the discussions reached Washington, veteran automobile labor conciliator Dewey evolved a plan of action, and ordered train tickets for Detroit. On arrival, he talked with officials on both sides, hopeful that he could reach an understanding on which new meetings could be held.

Meanwhile, tens of thousands of Chrysler workers, engaged in 27 war production jobs headed by the volume output of medium tanks, worked on without a contract. Pay rates continued unchanged. There was no indication that the union might take any early strike action to back up its demands, although there have been demonstrations by the men in recent weeks for another and unrelated reason—alleged slowness in recalls to work. It seemed that the National War Labor Board might be destined to handle another big auto case.

Labor Sore Spot

Cleveland mayor asks aid of Washington. NWLB moves into Alcoa situation. Pittsburgh is also a trouble center.

A third arm of the government, the War Production Board, now has undertaken an investigation of labor relations at the Aluminum Co. of America's Cleveland plant. Army Intelligence and the FBI were already on the ground trying to find out what personnel problems were interfering with output and how they could be handled (BW-Jun. 13'42, p85).

• **Bickering Persists**—WPB's regional director, John Virden, moved in because a recent work stoppage in the smelter unit, though settled after two days, left an aftermath of bickering which was considered dangerous. Leaders of C.I.O.'s Die Casters Union (the bargaining agency at Alcoa's Cleveland works) appeared either unable or unwilling to control their rank and file.

And, as if paced by the situation at Alcoa, other labor troubles—more widespread than at any time since the United States entered the war—bedeviled Cleveland industry. Ten wildcat stoppages in other plants were reported within eleven days. These lasted from 30 minutes to four hours, affected factories employing from 70 to 1,200 workers in vital war production. Most

times as many boilers a month



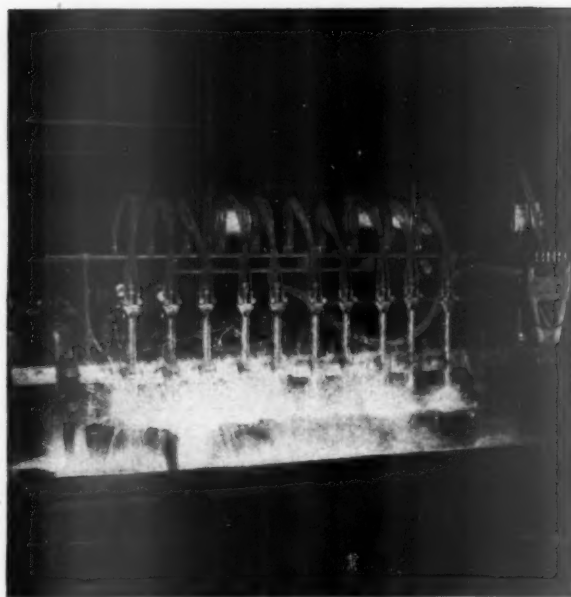
...for liberty ships!

Since July of 1941, Combustion Engineering's production capacity for Liberty Ship boilers has been multiplied again and again. By September of this year it will reach a rate 20 times as great as in July of last year. Since Combustion Engineering is supplying the boilers for many hundreds of Liberty Ships, the importance of this production achievement speaks for itself.

Typical of new time-saving methods which make such a performance possible is the oxygraph at the right. Its 10 fingers of flame at intense white heat, moving simultaneously over the sectional header for a Liberty Ship boiler, cut all the handholes in a single operation. Placed in service nearly a year ago, this oxygraph was the first of its kind and capacity to be developed in this country.

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A-670



COMBUSTION ENGINEERING

200 MADISON AVENUE, NEW YORK, N. Y.

of them had their origin in unsettled grievance claims and wage demands. • **Mayor's Appeal**—So grave was the condition considered that Mayor Frank Lausche headed for Washington with an urgent request that the National War Labor Board open a Cleveland office to deal with local disputes on the spot. NWLB records show that more controversies before it have come from Cleveland than from any other city.

Next to Cleveland, Pittsburgh was last week's worst labor fever spot. A deadlocked pay controversy between A.F.L.'s Teamsters Union and 190 motor carrier firms which handle about

90% of the area's heavy freight promised to erupt into a strike. John Steelman, the Conciliation Service chief, flew to Pittsburgh himself in an effort to find a compromise.

Other firms in Pittsburgh closed down by strikes or embarrassed by departmental work stoppages were Carnegie-Illinois Steel, where 250 roll turners went out to push a demand for a wage increase from \$1.18 to \$1.75 an hour; Pittsburgh Equitable Meter, where about 800 left their machines to demonstrate for a pay rise; the Cudahy, Oswald & Hess, Fried & Reinman, and Henry Lohrey meat packing companies

where wages were in dispute; the Duquesne Way wharf improvement project; the G. C. Murphy Co. department store; and the Great Atlantic & Pacific Tea Co. bakeries.

Pay Stabilization?

WPB airframe conference on coast expected to usher in regional anti-inflation pacts, but cue will come from NWLB.

July 9 is the date and Los Angeles the place fixed for the opening session of the management-labor conference which the War Production Board is convening to write a wage stabilization agreement for Pacific Coast airframe plants.

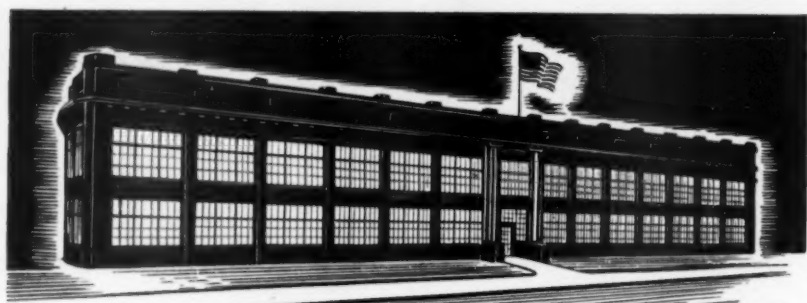
• **WPB's Objectives**—The parley will be the first step toward bringing the whole aircraft industry under a series of regional pacts designed to check inflationary tendencies which grow out of wage competition in the industry. If aircraft can be "mopped up," other important war industries will be subjected to the same treatment.

The proceedings will follow, essentially, the pattern which has been used with a large measure of success in creating national wage and work standards for the shipbuilding industry. C.I.O., A.F.L., employer groups, and government officials will participate, with WPB and Office of Price Administration men expected to play a major role.

• **A Test for Lund**—The Los Angeles meetings will also be the first important public test of the qualities of Wendell Lund, director of WPB's Labor Production Division. He will preside with the assistance of Paul Porter, who administers the shipbuilding agreements.

It will be Lund's most difficult task since he took over the war labor job from Sidney Hillman last April (BW—May 2 '42, p. 7). Lund has spent most of his time since going to Washington in establishing friendly relations with labor leaders in order that the division which he heads can be sure of their cooperation. In the airframe conferences he will have to reconcile their interests with a markedly different employer position and the Administration's wage policy.

• **Eyes on NWLB**—The July date for the meeting is a revision of earlier plans for negotiations to begin this month (BW—Jun. 13 '42, p. 7). It indicates an inclination on WPB's part to defer to the National War Labor Board, which is expected to make important declarations on wage rates in the near future, particularly in the Little Steel and General Motors cases. What NWLB has to say will exercise considerable influence on the proposals which Lund and other government representatives will make to the airframe interests.



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PRODUCTION

Bombers by Truck

New trailer-tractor giants are designed to haul Ford-built subassemblies to plant that is over a thousand miles away.

Giant new tractor-trailer combinations are cutting a path which may lead to significant developments in the postwar trucking industry. The immediate job that is being done links aircraft assembly lines which are more than a thousand miles apart. Ford-built subassemblies for Consolidated B-24 four-motor bombers are being trucked to the final assembly plant, several states away.

● **Too Big for Freight Cars**—Highway transportation was decided upon for several reasons. One of the biggest considerations was that the shippable sections of the Consolidated bomber grew too big for standard freight cars. Consolidated used to produce the plane in more than 60 subassemblies. Charles Sorenson, Ford vice-president, saw advantages in reducing the number of subassemblies to the neighborhood of fifteen, and his plan has been carried out. Each subassembly is a self-supporting structural unit. The fuselage, for example, is shipped in one cigar-like piece.

Reducing the number of subassemblies has meant less work for the final assembly plant. It has also been advantageous to the Army, since the Air Corps repair depots can stock and use the subassemblies as needed. With respect to shipping, a new problem was created at the same time that need for expensive crating or fixtures was dispelled.

● **New Equipment**—Trucking the subassemblies seemed to Mr. Sorenson to be

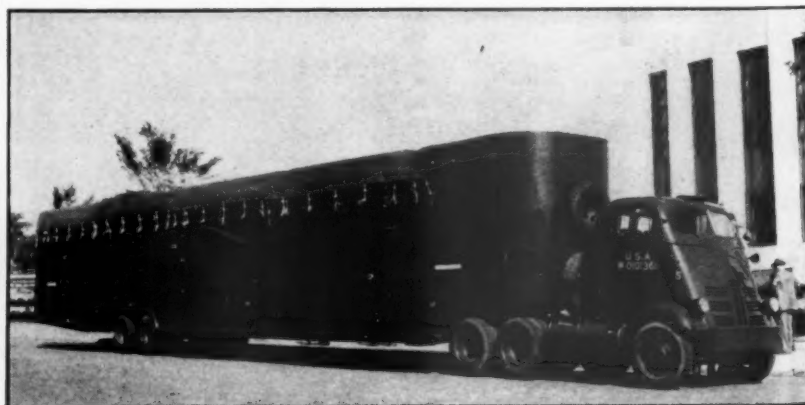
the logical solution, from the standpoint of both cost and safe handling. E & L Transport Co., Dearborn haul-away concern serving the Rouge plant, put the Sorenson ideas into execution. In turn, E & L called on Mechanical Handling Systems, Inc., to design the trailer, and on Thorco, Inc., for an improved model of its dual-drive tractor.

Experiments were made with scale models of the bomber subassemblies. It was found that two trailers more than 60 ft. long, with an interior width of more than 90 in. and interior height of more than 10 ft., would carry all components for one plane, including the four motors that are produced by another auto manufacturer.

● **How Load Is Carried**—One trailer carries the complete fuselage (tail end first to make a fit with the wheel housings of the transporting vehicle) and two rudders. The other trailer, of two-deck design, carries the center wing section (more than 50 ft.), the two outer wings, the four motors, two elevators, and the bombardier's enclosure on the lower deck. The upper deck carries the main tail surfaces, the two trailing edges, and the two leading edges. Trailer roofs are removable.

Despite the fact that the tractor-trailer combination has an over-all length of more than 70 ft., it will negotiate all street corners, underpasses, and curves on the long route to the final assembly plant. Total weight of the loaded combination will not exceed 50,000 lb., which—distributed on eighteen 84x20 in. tires—does not infringe the axle-loading laws of any of the states crossed.

● **Tandem Axles**—The load is cushioned by tandem axles as well as by tires and springs. Engineers report that these axles transmit only one-sixth as much road shock to the load as do single axles. And,



A large fleet of tractor-trailer combinations will soon transport Ford-built subassemblies for bombers be-

tween Willow Run and a southern assembly plant, thus linking assembly lines a thousand miles apart.

An Opportunity

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while a minimum of dunnage or supporting material is required, frames equipped with woven belting straps and slings give the bomber parts further protection from twists and vibrations due to driving conditions.

The improved Thorco Tractor has two Mercury 100-h.p. engines, run in synchronism, under single controls (accelerator, clutch, gear shift) and with four-speed transmission. Should one motor fail, the other provides enough power to move the load at good speed to the nearest repair depot. The power plant can be removed in ten minutes. To pull out the motors, eight bolts in the subframe which holds them are removed, and the gas line and electric plug disconnected. Then the subframe can be rolled out on casters legs let down for that purpose.

• **20 Hrs. Out of 24**—With a schedule calling for an average road speed of about 40 m.p.h., the combination is kept moving 20 hrs. out of 24. Two drivers alternate in five-hour shifts, leaving four one-hour periods for eating and servicing. In the interest of driver comfort and efficiency, the cab is air-conditioned, and space is provided for a sponge rubber mattress for the relief driver. The windshield can be rolled down in foggy weather for maximum visibility.

Tractors are not kept waiting for

loading or unloading. Extra trailers are used, and the tractor, detached from its load upon arrival at the final assembly plant, is immediately coupled to an empty for the return trip. After each round trip, the schedule calls for the tractor's being taken out of service for 24 hrs. for checkup.

• **Looking Ahead**—The Army Air Corps has contracted for about \$1,000,000 worth of these tractors and trailers at cost, all to be used in transporting that part of Ford's bomber production which will be assembled outside of its Michigan territory.

Commercial interests, noting that state barriers on over-length shipments have been set aside for these shipments, are keenly interested in the safety and efficiency of the venture. They believe that a good record will sweep away legislative prejudices against long tractor-trailer combinations.

E & L Transport is bent on proving that such combinations can even show a lower accident rate than much of the equipment now permitted under state laws. According to the Haulaway company, its outlaid 60-ft. trailers had a better safety record than vehicles which were cut down to conform to legal restrictions. Sixty of the company's drivers have received merit awards for three or more years' service without accidents in company service.



When low-grade tin ore is poured over the drum of the experimental new Westinghouse laboratory electrostatic ore separator, an "electric spray" divides it into two piles—a dark one containing 70% tin concentrate ready for the smelter, and a light one of rock "tailings."

Tin by Separation

Westinghouse machine uses "electric sprays" to wash metal out of low-grade ores, but separator won't ease shortage.

In Pittsburgh, at Westinghouse laboratories last week, a group of prominent metallurgists, including representatives from the U.S. Bureau of Mines, watched ten pounds of ore, ground to the fineness of dry beach sand, slide around a rotating metal drum.

When the drum stopped turning in about a minute, the ground ore, which contained about 14% tin, had been divided into two neat little piles. One pile was a 70% concentrate of tin and rock ready for the smelter; the other was just rock with too little tin left in it for smelting purposes. The electrostatic ore separator, developed by Westinghouse Electric & Mfg. Co., had successfully concluded its first public demonstration—and fast on the heels of that performance came news stories and editorials hailing the separator as a device which would relieve the tin shortage by making economically feasible the concentration of low-grade domestic ores.

• **Not in Prospect Now**—That such happy expectations are at best premature was underscored by Westinghouse in its express warning that the project was still only in the laboratory stage.

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For one thing, there isn't even much low-grade tin ore in the United States, and a lot of what there is—notably that found in the Southern Appalachian highlands from Virginia to Alabama—doesn't run as high as the 14% used in the demonstration. For another thing, there is very little extraction machinery available with which to work the potential mines of higher grade ore, such as is to be found in limited quantity in the Black Hills of South Dakota. With present methods of concentration this ore is not sufficiently high-grade to justify commercial mining operations, but it might prove worth working if electrostatic separation were used.

Finally, aside from the difficulty of obtaining extraction machinery, there is the problem of obtaining the critical metals and other materials needed to build full-scale electrostatic separators. High priority ratings would not be made available until the process had proved its commercial feasibility beyond question.

• **How Separator Works**—When materials are available for the construction of separators, they may find many varied uses, for the fundamental principle has wide applicability. Basically, that principle is one of electrical conductivity—or rather the relative conductivities of the two substances to be separated from each other. When the particles trickle onto the rotating drum, they receive high-voltage electrostatic charges or “electric sprays” from a series of parallel wires a short distance in front of the drum's surface. The tin particles roll right off the drum because they are good conductors of electricity and let the charges pass through to the drum. Meanwhile, the relatively nonconductive rock particles cling to the drum as though magnetized, until they are pulled off by a set of oppositely charged wires during the second half-revolution of the drum. Gold and iron were similarly washed out of ores by the “electric spray.”

• **Taking Out the Shells**—Westinghouse believes that its separator may eventually find a place in the food industry as well as in metallurgy. It may help food men separate granular raw materials from impurities that happen to be better conductors of electricity. For example, nut meats, with their high oil content, are poorer conductors than shells; hence, it may be possible to separate them electrostatically.

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Faced by a need for more power to manufacture its rubber belting, and no chance of adding new generating capacity, L. H. Gilmer Co., of Philadelphia, revamped its electrical distribution system, reinsulated steam lines, etc., “recovered power to spare.” Now Gilmer is embodying the power analysis forms it used in a “National Power-Recovery Plan,” as a patriotic service.



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Adding to the "mosquito" boat's streamlined toughness is Weldwood.* Molded Weldwood wheel houses and turrets withstand the pounding of heavy seas. Bulkheads and joiner work of Waterproof Marine Weldwood stand up against nerve-racking shock and vibration, tropical heat, salt and humid atmospheres.

Weldwood, made in Standard, Waterproof and Molded types, is strong, durable, split-proof and shatter-resistant. The Waterproof and Molded types offer the additional advantage of a phenolic resin bond (perfected by U. S. Plywood

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Wartime jobs done with Weldwood include deck houses for mosquito boats and mine-sweepers; landing boats and army pontoon boats; barracks, cantonments and war housing. Molded Weldwood is used for tubular radio masts, fuselages, ducts and other aircraft parts; small boat hulls for Army and Navy; Diesel engine hatch covers, and scores of other items.

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Makes the glue line the SAFETY line

Lean-Alloy Steel

New combinations to save scarce metals are now official and industry has to find which ones will do particular jobs.

Industry has, in general, taken none too seriously the talk of the past few months about the need to swear off using high-alloy steels for most applications. Manufacturers doubted that Washington would compel war contractors to abandon the fancier combinations of nickel, chrome, and vanadium to which they were accustomed except where these scarce alloying metals could easily be designed out of the product.

• **Advocated Officially**—In recent weeks, evidence has been piling up that the program means exactly what it says. Lean alloys now carry the official recommendations of the War Production Board. These also have, for wartime use, the published blessing of such potent technical bodies as the American Iron and Steel Institute and the American Society for Metals.

The American Steel Warehouse Assn. has recommended that its members stock lean alloys to cooperate with the government program. Half a dozen of the major warehousemen have already received allocations of those lean-alloy analyses which they are guessing will be most in demand, expect to have these in stock from the first mill heats, probably in August. Last week Jos. T. Ryerson & Son, Inc., biggest U. S. warehouse steel merchants, announced that they are now prepared to carry in stock a range of lean-alloy steels including two carburizing (case-hardening) grades, two medium hardening grades, and two high hardening grades.

• **Significant Figures**—Importance of making the lean-alloy program work may be estimated from figures recently released by the A.I.S.I. These point out that nearly 8,175,000 tons of alloy steel ingots, and castings were produced last year, about 65% above 1940 tonnage and 85% above 1929, which led all peacetime years. Alloy steels in 1941 were 9.9% of total U. S. steel production, contrasted with 7.4% in 1940 and 7.0% in 1929. The production of alloy steels in 1942 has thus far amounted to an even greater proportion of total steel than last year; estimates are over 9,000,000 tons for 1942 at the present rate.

What makes these statistics a basis for more concern than pride is that those alloying metals required in the more popular alloy steels are the very ones of which the shortages are most acute (BW—Jun. 13 '42, p. 70).

• **Getting Tighter**—Most nickel comes from Canada, but it is in such tre-

mendous demand that it has the tightest pinch of all the metals. Vanadium use is already running perilously close to maximum capacity. Molybdenum is available, but getting tighter. Chromium comes from abroad, and is next scarcest, with only a trickle arriving to replenish present stockpiles while efforts to develop supplies from low-grade domestic ores are still in the pilot-plant stage. Manganese, now obtainable with difficulty from abroad, is being sweated for in a program to extract it—at high cost—from the low-grade domestic ores.

Hitherto, steel circles seldom have been able to agree on how many or how high alloys are needed, or for what purposes. In peacetime, suppliers of alloying metals crusading for broader markets have effectively convinced many a user that a steel, to be worth using for almost anything, must contain generous percentages of their particular ingredients.

• **Competitive Angle**—Steel mill metallurgical service departments have had some slight incentive to combat this trend, as a means of competing on raw-material cost. One of the most potent sales weapons which an up-and-coming contact metallurgist could have for breaking into another mill's ball-and-chain accounts was an offer to run a heat of an alloy specially designed for the user's gears or axles or crankshafts, which alloy might be offered either as better for the purpose or as a lower alloy cheaper in price. In years past, it was



VISUAL BAKING

Glass technicians at Libbey-Owens-Ford Glass Co. point out that their startling glass-stove design at this time is a sort of after-hours form of relaxation (when they are not ears-deep in designs for winning the war). A heat-strengthened, translucent plate glass for the inside back wall of the oven, with lighting behind it, achieves shadowless interior lighting.

WE WANT WAR WORK!

OUR FACILITIES ARE

AT YOUR SERVICE



Stewart is qualified to give you production runs of iron, steel and wire parts and sub-assemblies involving the use of facilities listed. 350,000 Sq. Ft. of floor space; two railway sidings; truck loading platforms. Competent engineering and production staffs. Deliveries prompt; quality workmanship. Financial rating highest obtainable. To expedite inquiries, send specifications and full information.

Production Facilities

Punch Presses • Shears
Power Brakes • Spot, Arc and Gas Welders • Drill Presses • Bull Dozers
Automatic Saws • Heat Treating Furnaces • Finishing Equipment • Tool Room Equipment.



FABRICATORS OF
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THE STEWART
IRON WORKS CO., INC.
Established 1886
200 STEWART BLOCK
CINCINNATI, OHIO

LOW-COST GROUP HOSPITALIZATION and LIFE INSURANCE PLAN

A Good-Will and Efficiency Builder for Any Size Company

**OFFERS THIS
PROTECTION**
To Employee and His Family

- ★ Hospital Expense in Case of Sickness
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- ★ Surgical Expense
- ★ Hospital Fees (Laboratory, etc.)
- ★ Maternity Confinement Expense
- ★ Compensation for Time Lost from Work
- ★ Loss of Life Through Accident
- ★ Loss of Life Through Natural Cause
- ★ Physical Disemberment

**A SECURE WORKER
IS A HAPPY WORKER**



FACTORY, OFFICE, STORE GROUPS

Unique North American Plan affords dependable financial help for Company Employees and their families in case of unexpected illness or accident. No group too small or too large to participate. Plan offers exceptional coverage for factory, office, shop and store groups. No age limit. No medical examination. Life Insurance optional. Inclusion of family optional. Premiums—only a few pennies a day paid by Employee.

Mail coupon for details on introducing plan in your Company. No obligation.

NORTH AMERICAN MUTUAL INSURANCE CO.
Dept. 6-B, North American Bldg., Wilmington, Del.

Please send complete details on Employee Group Insurance Plan.

Name Title

Company No. of Employees

Address

City State

(Attach coupon to business letterhead)

a 75-ton kick in the panzers!



Confidence is the strong and good cousin of that horrid word complacency. Most Americans are confident, few are complacent today. Confidence is our heritage, bequeathed to us by the pioneers, and nurtured by headlines of industrial marvels.

From the day when the Flatiron Building made news, to the colossal statistics of Grand Coulee, we have become firmly convinced that no task is too great for our vast construction industry.

That conviction is justified. A year before Pearl Harbor Sunday was anything more than a gleam in treacherous oriental eyes, our engineers and contractors were moving earth faster than it had ever been moved before . . . in preparation for projects which since have made our skyscrapers and giant bridges look like mere trial heats.

You know part of the story. We can't tell it all . . . complete aluminum plants built between Christmases . . . whole farms transfigured into bomber plants in less time than elapses between crops of corn . . . great shipyards in operation today on inlets that were frog ponds when the "Battle of Britain" was at its height.

How were these miracles of construction performed?

We can't call it genius. Germany, in particular, has many great engineering minds, yet the entire Axis is outstripped by our capacity to do big jobs fast.

We can't explain it by just calling it skill and experience. The new shipyards prove that . . . our skilled and experienced shipbuilders were absorbed by navy construction long ago. Yet we have met each new quota of cargo shipbuilding. Deep in our hearts we all know industry

will meet whatever quota may be needed however impossible that may seem now.

► Some of these cargo ships and shipyards are being built by landlubbers . . . by men who knew nothing of the sea, but who were hell on reading blueprints and at designing and operating complicated machines.

There are several reasons why ordinary Americans become Supermen when faced by "fantastic" construction jobs.

► The first reason is the intrepid spirit of the management and men of American construction. With a slide rule in his hand, the most meek and stoop-shouldered of American engineers becomes a high adventurer. He is willing to gamble that the machines and men at his command can lick anything this side of the fourth dimension.

The second reason is motive power. The leaders of our construction industry have always had the guts to gamble the cost of big machines to do big jobs. Probably the rest of the world combined cannot match our array of power shovels, scrapers, bulldozers, compressors, welders, motors and engines for moving and moulding earth, water, steel and stone.

The third reason is men. A shovel weighing 75 tons needs a "75-ton mind" at the control levers . . . American labor takes to machinery as a co-ed takes to "swing."

The fourth reason is versatility. The construction industry is used to turning corners at high speed . . . to an organization that has built railroads, cathedrals, bridges, and movie palaces, making a munitions plant in a hurry just means more men, more machines and more night work, and more of that good American ingenuity.

In recognition of the miracle of war production—accomplished through the cooperation of American management and labor with the W. P. B. . . . this advertisement is published by the McGraw-Hill Network of Industrial Communication.

P.S. The fifth reason is "mobilized information"

Through a distinctively American process, the Industrial Press, trial and error are reduced to a minimum. Information on successful new techniques flows freely from job to job.

If a factory in Kansas succeeds in laying the dust and stopping ruts in its parking lot, an engineer with the job of quick-surfacing a jungle airport reads how it was done in a construction magazine.

If a shipbuilder finds he can cut construction time in half by building hulls upside down, other shipbuilders learn about it from their technical magazines.

At McGraw-Hill alone 153 editors and 725 field-correspondents are constantly combing construction as well as industrial jobs to find new and faster methods. This "know-how" is then routed through industrial magazines to every industry where it can be helpful.

In addition to the editors, many industrial advertisers keep men in the construction field to watch the performance of their machines. Their reports are used in industrial advertising to show operators how to make machines do

more work and last longer in these days of shortages of time and metal.

... Now this advertisement contains a moral and "commercial." The commercial objective is obvious. The moral is this:

► Let's remember how well government, management and labor are getting along together in the face of visible peril. When the war is all over, we need have no fear of the invisible perils of peace, if we tackle our jobs in the same cooperative spirit.

THE MCGRAW-HILL NETWORK

More than 1,000,000 of the executives, designers and production men, who give America her world supremacy in technical "know-how," use the editorial and advertising content of the 23 McGraw-Hill publications as a means of exchanging ideas.

MCGRAW-HILL BOOKS

Publishers of technical, engineering and business books for colleges, schools, and for business and industrial use.

MCGRAW-HILL PUBLISHING COMPANY, INC.
330 WEST 42nd STREET • NEW YORK

THE MCGRAW-HILL NETWORK OF INDUSTRIAL PUBLICATIONS

American Machinist	Coal Age	Electronics	Mill Supplies
Aviation	Construction Methods	Engineering & Mining Journal	Power
Bus Transportation	Electrical Contracting	E. & M. J. Metal and Mineral Markets	Product Engineering
Business Week	Electrical Merchandising	Engineering News-Record	Textile World
Chemical & Metallurgical	Electrical West	Factory Management & Maintenance	Transit Journal
Engineering	Electrical World	Food Industries	Wholesaler's Salesman

always possible to fall back upon heavier alloys for difficult applications.

Some technicians have been known to hold the trend toward rich alloys a metallurgical waste. It has been claimed that many users regularly bought alloy steels of analyses far beyond what they actually needed.

• **Low-Alloy Steels**—A few sophisticated users of big tonnages have unofficially indorsed this view by setting up approved lists of relatively low-alloy (and low-cost) steels, then compelling their design engineers or production men to talk fast and convincingly to earn per-

mission to incorporate a more elaborate steel in a product.

Outstanding instance is probably the line of open-hearth alloys in use within the past seven years by Chrysler metallurgists, and listed by the A.I.S.I. in the 4000 series. This group contains ordinary percentages of manganese and molybdenum, but has no nickel, vanadium, or chrome content. These steels have been made available to other users.

• **Committee's List**—A committee of metallurgists representing major steel mills, producers of alloying metals, and big steel users in the war industries,

was set up many months ago to build a list of lean alloys that would be adequate to meet most industrial requirements if properly heat-treated. The committee's report to the War Production Board last winter was promptly adopted and made official. It recommended 16 alloys, to which the A.I.S.I. assigned numbers in the 8000 series, prefixed with NE for "National Emergency."

Of this list, half the steels contain no nickel or chrome, and have manganese 1.00-1.60% along with molybdenum 0.10-0.60%. The other eight carry manganese 0.70-1.30%, molybdenum 0.15-0.40%, nickel 0.40-0.60%, and chromium 0.40-0.60%.

• **High Though Lean**—On the NE list these latter are considered high alloys, although their content of scarce metals is very lean indeed compared with analyses that were common in industry when economy of metals was no object other than cost saving. Recently the WPB has authorized the use of 10 carbon-molybdenum steels from the A.I.S.I. 4000 series as approved lean alloys.

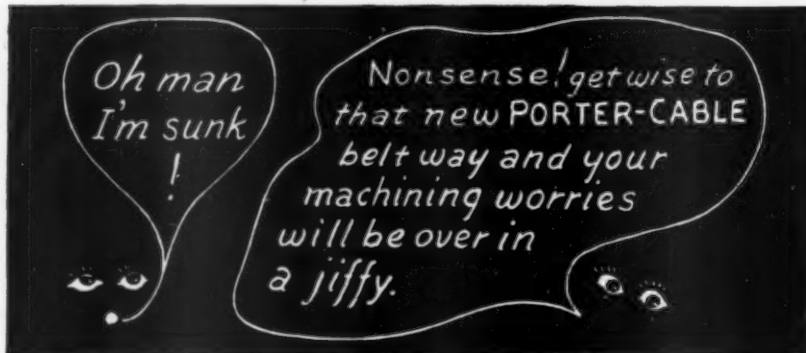
The NE and carbon-molybdenum steels are being substituted for steels with ranges of 1.00-5.00% nickel, 0.40-1.10% chromium, and 0.10-0.15% vanadium. Nowadays any firm seeking allocation of high-alloy steel under the Production Requirements Plan may expect to be questioned exhaustively about its actual need for these vital materials. Also, its representatives will usually depart with an allocation permitting the purchase of any steel on the approved lean-alloy list.

• **Experimentation** — War contractors who have asked WPB men which 4000 or 8000 series analysis to use have been told, "You'll have to determine that by experience. And you'll have to experiment with the heat-treating, too, for it is probably the key to successful use of lean alloys." Need for shop experimentation with the lean alloys is the reason why steel warehouses are encouraged to carry them in stock, thus making them available for tryout purchases.

Production men who run to the Army or Navy for help in getting WPB's lean-alloy allocations liberalized are reported receiving little comfort in that quarter.

• **Specifications Relaxed**—Steel men keep hearing of military specifications relaxed to ease the pinch, some of the changes minor but all of them indicative. Sample: The high alloy steel hinge pin for tank doors, recently abandoned for any old type of carbon steel, since combat experience shows danger from failure of the part to be unimportant.

The Metallurgical Section of WPB is urgently requesting reports from industries as fast as experience is gained with the new lean-alloy steels. Reports are desired which give details of each operation such as forging or machining, response to heat treatment, and service life.



Booklet explains New Methods. Write for FREE Copy Today.

Porter-Cable's New Machining Method Performs Production Miracles

Large numbers of plants called on to do the impossible have met that challenge and, with the help of this new machining method, have made their original schedules look like "peanuts."

Handicapped through lack of large machine tools, they investigated the performance of Porter-Cable Wet-or-Dry Belt Grinders on some of their jobs usually done on millers, shapers, planers, grinders, or by other slower means, and were amazed at the high production, with toolroom accuracy, this new method accomplishes.

Close Tolerances — Unskilled Help

Most jobs, by this method, are done either freehand, or where extremely close tolerances (up to .0005) must be held, with simple, quickly-made fixtures. Experience is unnecessary. Small parts excellent for women workers — no dust, heating, warping or discoloring. Works metals, glass, plastics, hard rubber, fibre, etc.

Production Men Amazed — Elated

Frequent remarks from Production men who have put this method to work — "Broke our bottleneck." "Much faster and finer finish." "Didn't believe it until I actually saw it." "Increased our milling production five hundred per cent." "It certainly opened my eyes."

You'll say the same when you actually see this new method demonstrated — so ask us for complete details, without delay — without obligation.

PORTER-CABLE
MACHINE COMPANY

2030-6 N. Salina St., Syracuse, N. Y.



YOU CAN call it temper if you want. But I just didn't think Mr. Lewis had any right to say, "Your boss is behind the times" — even though our offices were noisy. After all, Mr. Lewis is an outsider!

"I admire your loyalty, Miss Wilson," he said. "But if you got around like I do and could see the improvement sound-conditioning brings — you'd say *any* office manager who didn't install it was behind the times."

Imagine how I felt, a couple of days later, when the boss dictated a letter to the Acousti-Celotex Distributors! His first words were: "We think we are a little behind the times in not getting to office sound-conditioning sooner." — The letter went on from there asking the Celotex people to make a survey and present an estimate.

This was a year ago. We've since had our office sound-conditioned. Believe me it's grand! And with the office noise and din eliminated, we've cut overtime, mistakes, errors, and absences away down. Maybe the boss *was* a little behind the times — but he didn't stay there long!

Today, more than ever, Celotex Sound-Conditioning is proving its value. Not only in offices but also in factories where war materials are being produced. In educational and recreational quarters and churches, sound-conditioning is doing an important job. By reducing noise and contributing to better hearing, Celotex Sound-Conditioning promotes accelerated effort and greater comfort where people work, play or worship.

Celotex Sound-Conditioning is available to you *now*. Production facilities permit the acceptance of unrated orders as well as high priority jobs.

A note on your letterhead will bring the Celotex Sound-Conditioning representative in your territory to your desk. Without obligation, he will make a survey of your problem — tell you what can be accomplished and what it will cost. Write today.

FREE OFFER: The illustrated magazine, "Quiet Forum," which recounts the case histories of many sound-conditioning installations, will be sent to you free on request. Learn how modern sound-conditioning is contributing to profit and comfort all over America. Address: The Celotex Corporation, Chicago, Illinois.

CELOTEX

SOUND CONDITIONING

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*save
metal*

**help defense
and modernize
your addressing**



Elliott

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- 10,000 impressions guaranteed.
- They save 40% of the filing space required for other plates.
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Send for our catalog with complete information and address of our nearest branch office.

THE ELLIOTT ADDRESSING MACHINE CO.
151 Albany Street, Cambridge, Mass.

Elliott

ADDRESSING MACHINES

NEW PRODUCTS

All-Position Electrode

Many welding shops and fabricators use alternating current arc welders for work in horizontal and flat positions, direct current welders for vertical and overhead positions. Now comes General Electric Co., Schenectady, N. Y., with its new Type W-26 G-E Welding Electrode for producing "high-quality a.c. welding in all positions." The new rod "complies with the requirements of the following specifications: A.W.S. Filler Metal Specification E6011; Navy Bureau of Ships Specification 46E3, Grade 3, Class 1; and the A.S.M.E. Boiler Code, Paragraph U68."

Cool Extension Light

When one of the many Detroit plane-parts manufacturers wanted a cool light for work in the interiors of bomber wings and other constricted places, Hygrade Sylvania Corp., Ipswich, Mass., designed its new Fluorescent Extension



Cord Light with outside dimensions of only $9\frac{1}{2} \times 1\frac{1}{2} \times 1$ in. Since its tube requires only 8 watts of current, yet provides plenty of glareless illumination, it throws off considerably less heat than an incandescent light burning 25 to 100 watts. The grille protecting the tube is heavy-gage steel, enameled inside and out.

Rubber Extender

If your organization is still able to get rubber for its products, but wishes to conserve every possible ounce of it, you will want to know about "Extendex C," new product of Wishnick-Tumpeier, Inc., 295 Madison Ave., New York. It is a sponge-like material prepared by patented processes from vegetable oils, can be used to replace from 5% to 20% of rubber in many types of compounds (including those required for chemical and abrasion resistance), and

is said to enter readily in the vulcanization reaction.

Plastic Sprays

Now that brass is practically all allocated to war goods, H. B. Sherman Mfg. Co., Battle Creek, Mich., comes to the



rescue of factory and home lawns with a whole new line of Plastic Sprinklers, nozzles, and Hose Couplings. Pictured are several types of fixed and adjustable hose nozzles, hose couplings, a stationary sprinkler, and three color combinations of a little "bomb nozzle" for throwing a fine spray on either incendiaries or garden flowers.

Rubberless Erasers

A new compound of resin, oil, and a South American gum replaces rubber in the erasers of Irvington Pencils, made by Richard Best Pencil Co., 1006 Grove St., Irvington, N. J., rubs out mistakes cleanly.

Magnetic Clamp

The new d.c.-powered Stearns Magnetic Welding Clamp will be built in



various sizes by Stearns Magnetic Mfg. Co., Milwaukee, to expedite the work of shipbuilders and other welders of steel plate. The 10-in. model illustrated will not only clamp the edges of two plates together with a 2,000-lb. pull, but will draw their surfaces into level alignment and hold them there.

"If They Will Help Do These Things, We Want 'Em!"

- Conserve Critical Materials
- Make Present Equipment Last Longer
- Reduce Production Delays
- Maintain Piping Efficiency
- Train New Maintenance Men
- Standardize Maintenance Practice

... Say more and more plants about "Piping Pointers"

America was still at peace when "Piping Pointers" were conceived. As leader in its field, Crane Co. recognized its responsibility to help industry gird for today's emergency. Pipe lines—the lifelines of industry—would have to be kept flowing with minimum interruption. Valves, fittings, and piping would have to give better and longer service; and thousands of new

men would have to be trained to look after them.

Today, "Piping Pointers" bulletins are aiding numerous plants accomplish these things—by helping veteran maintenance workers keep "brushed-up"—by teaching beginners the fundamentals of good piping practice. If your plant is not already using this Crane aid-to-Victory service, remember, it is available free.

PIPING POINTERS TO KEEP EQUIPMENT ON THE JOB!

 HOW TO USE A WRENCH When using a wrench, always use the correct size for the job. A wrench that is too small will damage the pipe and the fitting. A wrench that is too large will not fit properly and will not give a good grip.	 LOOK OUT FOR HOT SPOTS When using a pipe wrench, always use the correct size for the job. A pipe wrench that is too small will damage the pipe and the fitting. A pipe wrench that is too large will not fit properly and will not give a good grip.	 HOW TO MAKE A GOOD JOINT When making a joint, always use the correct size for the job. A joint that is too small will not fit properly and will not give a good grip. A joint that is too large will not fit properly and will not give a good grip.	 HOW TO MAKE A GOOD JOINT When making a joint, always use the correct size for the job. A joint that is too small will not fit properly and will not give a good grip. A joint that is too large will not fit properly and will not give a good grip.	 HOW TO MAKE A GOOD JOINT When making a joint, always use the correct size for the job. A joint that is too small will not fit properly and will not give a good grip. A joint that is too large will not fit properly and will not give a good grip.	 HOW TO MAKE A GOOD JOINT When making a joint, always use the correct size for the job. A joint that is too small will not fit properly and will not give a good grip. A joint that is too large will not fit properly and will not give a good grip.	 HOW TO MAKE A GOOD JOINT When making a joint, always use the correct size for the job. A joint that is too small will not fit properly and will not give a good grip. A joint that is too large will not fit properly and will not give a good grip.
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CRANE
BULLETIN NO. 1—PIPING POINTERS FOR PEAK PRODUCTION

For Defense **TREAT PIPING RIGHT!**

"Piping Pointers" are helping veterans as well as men who had never handled a wrench before. They are full of "kinks" that make the difference between good and bad installation—that speed-up work, step-up efficiency of piping.

CRANE

CRANE CO., GENERAL OFFICES:
836 SOUTH MICHIGAN AVENUE, CHICAGO
VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

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"Cover-to-cover, the facts indicate it is one of the most **USEFUL** magazines in America today. Wherever you find it, you find a business man... well informed."

TRAINER PLANES

for example...



—where HASSALL nails are made especially for a specified requirement. Investigate special nails to replace other fasteners. Catalog free.

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Established 1880
408 Oakland Street
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SELECTIVE SERVICE in Business

WHEN you use Business Week "clues" to solve any business problem—employment, sales, or other business opportunity, you are employing a "selective service" that assures you a 100% audience of Management-Men—119,000 subscribers to Business Week who use it each week in solving their business problems.

Concentrate on this highly concentrated market . . . go direct—and ONLY—to the men most likely to be able to supply your want—throughout the field of American business and industry. You will reach the right men—at the right time—when they are in a problem-solving mood.

Let Business Week's special "clues" advertising section select your audience, automatically—and economically. Rate: 50 cents a word; minimum \$5. Copy Tuesday for Saturday's issue.

New Arms Pool

Group in New England gets contract that none of members could have handled alone, passes work out to companies.

How twelve small New England manufacturing firms together are able to share a prime contract for arms is the story of the newly-formed New England Small Arms Corp. The new company groups metal-working plants located from southern Connecticut to Maine.

• **Subcontractors Used**—With the help of several subcontractors who are not members of the pool, the Small Arms Corp. met the government's needs and obtained a substantial job. Although some of the member firms had subcontracts before, by combining in this way they were able to land this assignment which otherwise would not have been available to them. The member plants employ from 100 workers in the smallest to about 1,000 workers in the largest plant.

Each member plant gets the work which it can do best. Periodically, engineers will visit each of the plants to see how they are solving particular production problems.

• **All Have a Voice**—Directors of the corporation are drawn from the ranking officers of the members, and the board is to meet each month to discuss management problems. During the company's formation they met at the headquarters of the New England Council—convenient neutral ground for reaching an agreement.

When financing is required, it will be secured through the various government agencies supplying money for war production. This is considerably simplified because the credit rating of the combination is higher than those of the individual members.

The Army withholds the names of the twelve companies as well as the details of products manufactured.

Housing Go Sign

WPB provides materials to keep construction going on 6,000 homes for war workers in crowded Detroit area.

A green light has been switched on by the War Production Board to permit construction of nearly 6,000 defense homes in Detroit, part of a program designed to avert a growing housing shortage (BW—Jun. 13'42, p74) in that arms-manufacturing area.

Work had already stopped on



ANY LEMONS TO SQUEEZE?

Four leaders in American education, industry, and government inspect a 1,000,000-lb. testing machine, part of the equipment in Northwestern University's new \$7,000,000 Technological Institute (gift of Walter P. Murphy, Lake Forest, Ill., railroad supply manufacturer): (left to right) President Franklyn B. Snyder of Northwestern; Charles F. Kettering, president of General Motors Research Corp.; V. K. Zworykin, Asst. Director of RCA research laboratory at Camden, N. J., and Lieut. Gen. William S. Knudsen, Army procurement chief.

approximately 3,800 homes, and another 2,100 were threatened with stoppage by the end of June, when the board ruled that A-1-k orders for copper wiring for homes could be moved up to the A-1-j level in the case of the Detroit electrical contractors involved on the jobs.

Approximately 30,000 residential construction workers are estimated to have been forced into idleness by the copper wire tieup of recent weeks. They will be going back to their jobs in the near future, it is expected.

WPB's decision came after two weeks of negotiation in Washington, participated in by J. S. Knowlson, WPB director of industry operations; James E. Wilson, Detroit regional priorities manager; and the Army and Navy Munitions Board. They decided that although copper wire is admittedly a very critical material, the defense housing projects now under way should be completed.

Nothing was said about housing planning for the period ahead. There have been constant reports in Detroit that such work would probably be shelved.

FINANCE

Rift in N.A.S.D.

Governors' proposal of a minimum capital requirement for members draws fire, especially from ones who'd be forced out.

New commotion broke out in Wall Street's rumpus room last week as members of the National Association of Securities Dealers began to vote on proposals for a minimum capital requirement.

• **An Amendment Did It**—Immediate cause of the controversy was an amendment which N.A.S.D. governors submitted to the members for approval. It provides that, to be eligible for membership, an over-the-counter dealer must have \$5,000 net capital if he does his own clearing, or \$2,500 if he clears through someone else.

Just by itself, the proposal would stir up highly vocal opposition. Between 10% and 15% of N.A.S.D. membership now works on less than \$2,500 net capital, which means that unless they could scare up more money, the requirement would nudge them out of the association. About another 10% falls in the bracket between \$2,500 and \$5,000. While these dealers could keep their membership, they would have to get a bank or an unrestricted member to handle the actual transfer of customers' funds and securities for them.

• **Not Fatal, But a Blow**—Dropping a dealer from the association wouldn't put him out of business, but it would hurt his prestige and probably take away some of his customers. Furthermore, non-members are not allowed to receive the concessions that members get when they help each other market securities.

Opposition is not confined to the small firms, however. Many of the dealers campaigning against minimum requirements stand comfortably above the \$5,000 mark. Some started on a shoe-string themselves and sympathize with dealers who can't scrape up the minimum. Others think this is a good time to settle the fundamental question of what the N.A.S.D. is and what it is supposed to do.

• **How It Began**—The idea of a self-governing, nationwide over-the-counter organization dates back several years. With the help of the Securities and Exchange Commission, special legislation to this end was obtained, and the N.A.S.D. came into being three years ago. Its announced purpose was to enforce rules of fair practice and to estab-

THE MARKETS

Developments in the tax situation added to the market's uneasiness this week. While unfavorable war news was the main cause of weakness in stock prices, Ways and Means Committee decisions on railroad taxes and postwar credits contributed to it.

• **What the Roads Planned**—Railroads were particularly disappointed when the committee passed over their request for a modification of the capital gains tax on bonds repurchased below par. Now that the roads are earning money again, they want to cut down their debt load. For many, the easiest and cheapest way to straighten out their cumbersome capital structures is to buy back their own bonds, now selling below par (BW—Apr. 11'42, p.84).

Under present law if a corporation buys its own securities it is subject to a capital gains tax on the difference between the price it pays and par value. The only way a road can dodge the tax is to have the Interstate Commerce Commission certify that it is in unsound financial condition. The roads won't do that except as a last resort because it means ruining their credit ratings.

• **Request Passed Over**—Last spring the railroads appealed to Congress for a change in the law which would exempt repurchased securities from the capital gains tax. This week the Ways and Means Committee rejected the proposal by voting to extend the present law without change.

Unless the roads can persuade the Senate Finance Committee to write an exemption into the new tax bill, they will have to wait at least another year before they can start buying up below-par bonds. And by that time the whole picture may have changed. The Treasury provided some unexpected encourage-

ment, however, by announcing that the exemption plan was not dead and might still go through this year. With Treasury support, the railroads will probably win their point in the end, but the odds are against getting an exemption into this tax bill.

The decision on postwar tax rebates also discouraged many traders. Wall Street thinks the refund idea is better than nothing, but it doesn't expect any effect on dividends in the near future. Eventual consequences are too uncertain to make much difference in stock prices now.

• **Two Possibilities**—When the committee deadlocked on the refund question, many traders hoped it would settle the issue by lowering the excess-profits tax rate instead of by providing postwar credits. A lower rate would leave money available for dividends now; refunds are too far in the future to count on.

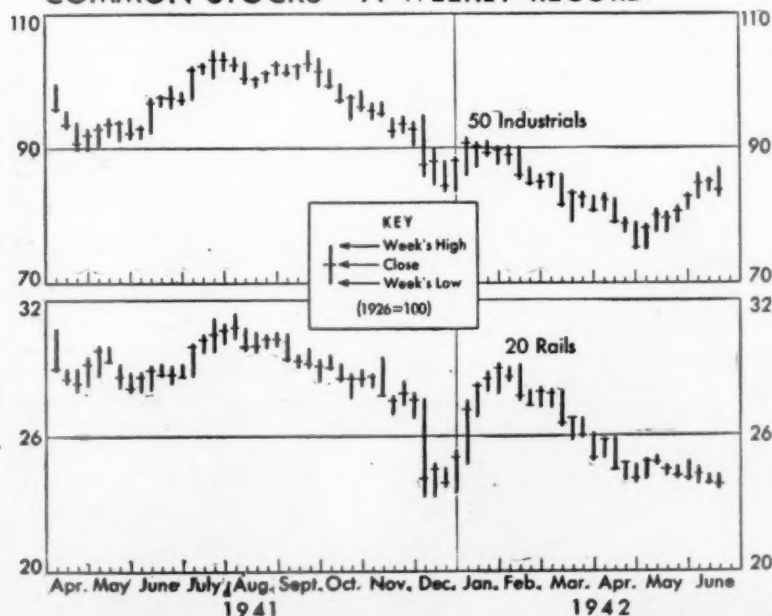
Moreover, the committee attached an impressive set of strings to the credits. They cannot be used for dividends or bonuses. They cannot be added to cash reserves except working capital. They cannot be used to purchase securities.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	83.7	85.0	80.6	97.6
Railroad ...	23.8	23.9	24.2	28.7
Utility ...	30.5	31.5	30.1	45.0
Bonds				
Industrial ...	107.6	107.9	107.9	103.9
Railroad ...	82.5	82.3	85.5	87.7
Utility ...	104.5	103.1	102.4	106.4
U. S. Govt. ...	110.8	110.9	110.9	111.7

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

COMMON STOCKS — A WEEKLY RECORD



Data: Standard & Poor's Corp.

© BUSINESS WEEK



on the PRODUCTION FRONT

In our race to produce as much as possible in the shortest time, irregularities of production are bound to occur. Certain parts or materials may be produced or processed in excess of immediate needs. This causes a temporary storage problem that diverts valuable floor space from active production.

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LEWIS
INDUSTRIAL CONTAINERS

lish ethical standards for the unlisted securities business.

Membership was not compulsory. However, SEC's blessing for the new organization sent it off to a fast start. About 90% of the eligible dealers joined. Under the original bylaws, N.A.S.D. police power extended only to business conduct.

• **Governors' Attitude**—Now, as the amendment makes evident, the governors want to extend regulations to include minimum capital requirements. Ethical standards, they say, are no protection for the public if dealers are allowed to work on an unsound basis. If the investor loses his money, he doesn't care whether dishonesty or incompetence caused it.

The governors' ambition is to build up the association's prestige until membership means something to the public. To do this, they believe they need control over financial standards. With minimum requirements, they hope to cut down insolvencies and force out the ne'er-do-wells who drift into the securities business for lack of anything else to do.

• **Small-Firm Problem**—The governors have little to say about dealers who would be forced out by the new requirements. Actually, it would be a relief to get rid of most of them. The small firms have been a big problem in fair practice regulation, and the governors hope mini-

mum requirements will clean out a lot of shaky outfits the ethical standard couldn't pin down. About 300 present members would be hit by the new rules but many could raise enough extra capital to keep their memberships. Except for a few hardship cases, the governors expect the forceouts to be a benefit.

At present, about three-quarters of the membership agrees with the governors. The others—including several influential members—disagree violently and intend to tell the world about it.

• **Dissenters' Position**—The opposition insists honest and competent members would suffer, and that established houses could be ruined. It contends that the amount of capital needed varies with the type of business; that a flat minimum is unrealistic and unfair; that every man should be free to enter the security business if he chooses; that it is undemocratic to make wealth a qualification; that character, not capital, is the essential quality in finance.

Dealers fighting the proposals also invoke the specter of tighter government regulation, always strong medicine in Wall Street. They contend that if N.A.S.D. pushes the small dealers out from under the wing of self-regulation, the SEC will take charge of them. At about that point it may appear that the N.A.S.D. isn't performing a job of self-regulation, that the SEC might just as well take over the whole unlisted market. That, the boys yell, is too high a price to pay for a doubtful reform like minimum capital requirements.

• **Fight Will Go On**—In spite of the opposition, most dealers expect the amendments to go through, probably by a heavy majority, but the fight won't end there. The minority can ask for an SEC hearing on the new bylaws, and from there on out Queensberry rules won't apply. SEC has already looked over the proposals and given them silent approval, but a stiff fight at the hearing might bring some modification.

Even if the SEC supports the new rules, the feud will go on. The association is still a long way short of the governors' ambition, and there will be plenty of new battlegrounds as the up-lift movement proceeds.

GROUP INSURANCE GAINS

Increasing employment of workers by large plants is swelling the demand for group life insurance. In May, new group insurance was 87.7% above 1941 (group's record year) and in the first five months of this year it was up 87.8%.

Group still accounts for less new business than the other two classes of life insurance, but it is coming up rapidly. Reports of the Association of Life Insurance Presidents, covering 39 companies, show that a total of \$580,124,000 new paid-for life insurance was

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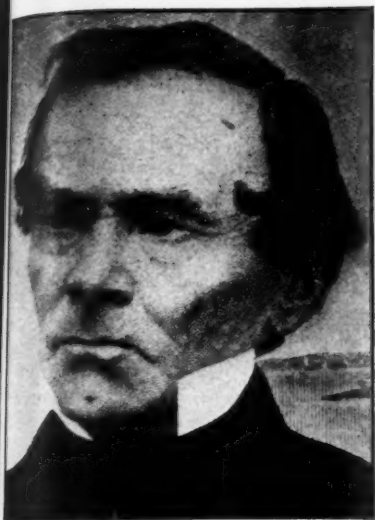
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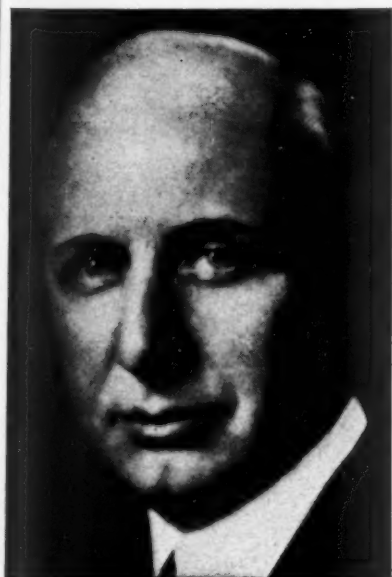
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ERIE COMMON PAYS!

Only six months out of its latest reorganization, the ancient and much-manhandled Erie Railroad (BW—Jan. 29'38,p28) has declared a dividend on its common stock. When the payment of 50¢ a share is made on July 10, it will mark the first dividend for common stockholders in 76 years—or since the days when Jay Gould, Jim Fisk, and Uncle Dan'l Drew were milking the Erie in their incessant battle with Commodore Vanderbilt. When the last payment was made, it was under the presidency of that pious old pirate, Drew (above); the present management has been headed since last October by Robert E. Woodruff. The Chesapeake & Ohio, which now owns substantially less than 10% of Erie's common, will get \$107,000.



Aircraft Assembly Plant, constructed by the Austin Company, Ventilated by 100 Buffalo Fans, with Buffalo Air Washers.

Over the expanse of floor space in this mammoth plant briskly roll the assembly lines of deadly bombers—bombers for the Victory offensive. Clean, fresh air is an essential "raw material" in this

relentless, 24-hour-a-day production—air to keep workers alert and efficient and able to carry on during every precious hour of the day. Buffalo Fans are faithfully fulfilling this important assignment—a hundred husky Buffalo Fans, with Buffalo Air Washers to clean and temper the air, and provide made-to-order atmosphere for maximum efficiency... In many such ways, Buffalo equipment is serving Industry in today's Battle of Production!



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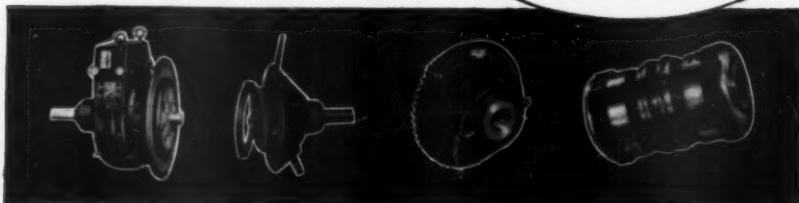


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written last month. This represents about 81% of the total business. Ordinary insurance accounted for \$350,973,000, about \$10,000,000 less than April and \$108,000,000 below May, 1941. New industrial insurance was \$141,378,000, slightly above April, but 6.6% below May last year.

In the five months since the beginning of the year, new paid-for insurance has totalled \$3,463,669,000, a gain of 10.8% over last year. Ordinary insurance accounted for \$2,386,493,000—about two-thirds of the total. Industrial insurance was \$667,447,000, and group insurance \$409,729,000.

WHIPPLE TO HEAD I.B.A.

Choice of the official slate of nominees for officers of the Investment Bankers Association of America—headed by Jay N. Whipple of Chicago for president—was announced on Thursday. As nomination is tantamount to election. Mr. Whipple, partner in the firm of Bacon, Whipple & Co., members of both the New York and Chicago stock exchanges, is almost certain to succeed John S. Fleck of Cleveland, incumbent, at the October election.

Vice-presidential nominees include Arthur C. Allyn, Chicago; Albert T. Armitage, Boston; John C. Folger, Washington; Albert H. Gordon, New York, and Edward Hopkinson, Jr., Philadelphia.

RAILROAD TAX MUDDLE

The State of New Jersey during the last month has turned back to the railroads \$12,500,000 which the carriers had tendered as a second instalment on taxes accumulated between 1933 and 1936 (BW—May 30'42, p68). An earlier instalment of \$10,000,000 was accepted but can't be touched until the courts settle constitutionality of recent legislation waiving penalties on the back taxes claimed by the government.

COMMODITIES

If the Shoe Fits—

You may have to wear it and not be too finicky about the sole. Here is the story of hides, leather, and the war.

When the Boston Shoe Fair closed on June 5 with a record of normal social success but scarcely any business done in fall lines of shoes, the low level of sales nailed one more peg in the probability that the country's huge shoe production

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gone over the crest and will turn
ward in June.

Rationing Being Delayed—Reasons are
et, as would have been supposed a few
weeks ago, the growing leather shortage
and possibility of inventory control and
consumer rationing by the government.
Leather is tight, no question about it,
the inventory control was disclaimed by
Washington several weeks back, and
during the Boston Fair a War Produc-
tion Board civilian supply deputy as-
sured the trade that rationing could be
avoided this year.

Facts are that retail demand has been
slipping, and retailers, with big inven-
tories, have changed generally from a
hoarding policy to liquidation of current
stocks. The switch has been hastened
by imposition of retail ceilings under
maximum price regulations, removing
retailers' fear of advancing prices.

Hole in Hide Supply—The longer term
outlook for fewer and less good civilian
shoes is by no means abated. Military
needs have cut a vast hole in the hide
supply available for civilian products.
In addition, almost the whole weight of
demand for rubber and part-rubber shoes
has been thrown over onto the leather
industry.

Logically, since domestic hide sup-
plies are limited by cattle slaughter and
the imported fraction of hides con-
sumed (about 15% usually) is limited
by uncertain shipping space, the leather
available per civilian will be smartly
clipped. According to the Tanners'
Council, the outlook for civilian shoe
production may well be about 260,000-
300,000 or 270,000,000 pairs in 1942 com-
pared with 485,000,000 pairs in 1941.

What Happened in '41—Measure of
the shoe boom in 1941, which set a new
high record for production, is apparent
in the percentage increases over 1940.
In 16 classes of shoes, lowest increase
over 1940 was 7.2% (civilian men's
work shoes) and highest 59% (beach
sandals). Measure of the military influ-
ence lies in the figure of 15,300,000
pairs of military dress and work shoes
produced against a negligible total the
year before.

During the first four months of this
year, when shoe production continued to
ride up on new monthly highs, the pro-
portion of military shoes jumped rapidly,
totaling almost 4,000,000 pairs, close to
40% of the comparable production fig-
ure for civilian men's shoes.

Leather Production—Supporting this
burst of shoe production activity, leather
production last year was stepped up from
normal of about 20,000,000 cattlehide
equivalents to a new high of 28,000,000,
and imports started rising in the last
quarter of 1940. Thus, despite total dis-
appearance of 29,000,000 hides, also a
new high, stocks of cattlehide leather
in process and finished at the end of
1941 had risen to 14,000,000 compared
with 9,500,000 at the previous year end.



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Micro Switch is its ability to operate at
precisely the same point at a speed of over
three hundred times a minute for millions
of operations. This means that in those
millions of operations there will not be a
variation of even as much as one-thou-
sandth of an inch in the point at which it
will operate.

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use in the adjustment of fine watches, in
its application as a safety on a 50-ton
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tion on special switches.



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similar information for air-
craft and aircraft access-
ory engineers, and others
whose requirements are
similar to those of the air-
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Imports of hides are now, to say least, undependable, so that production of cattlehide leather for 1942 will run 20% under 1941, or in the neighborhood of 22,000,000, despite prospective increase in cattle slaughter here.

• **Military Demands**—The Army will only take a lot of this total, but also best. Army uses will absorb, for example, approximately one-third of all leather, including the heaviest and best.

Adding up the military bite out of the leather supply, including up leather and miscellaneous equipment leathers, the Army will take up 9,000,000 hides out of about 22,000,000 available. It is true that former civilian now in uniform won't be buying civilian shoes at the neighborhood booter, but this decline will be much more than offset by the added footwork civilian without gas and tires are going to do.

• **Present Inventories**—Tanneries today have roughly a hide and leather inventory equal to six and one-half months supply, which is only a half month behind what they consider a comfortable normal basis. Total national inventory of leather products, however, as is natural after 16 months of sustained high temperature production, are much higher than normal, even considering the rising rate at which the military has been tapping supplies.

In fact, the inventory position in finished goods for the time being tends to be obscure, or at least soften, the truth that our skins are getting too tight to fit.

• **Gradually Congealing**—The government, beginning with the Office of Price Administration hide ceiling on June 16, 1941, has been gradually congealing the hide, leather and shoe industry, even though not coming to the point of freezing it solid by inventory control and consumer rationing. That is still in the cards, but possibly not much beyond the corner of the year.

In other leathers beyond cattlehide, the military influence varies. Army and Navy takings of calf leather will total only 1,500,000 skins, leaving 10,000,000 skins for civilian consumption, much below normal, but not disastrous.

• **As Regards Shearings**—Civilian consumers may as well give up hope on any of the wool skins called shearings, since the War Production Board has frozen first choice for the military. Any rejects, however, may pass along to consumers for hunting parties or other affairs requiring shearing costumes. No leniency is in sight for this class of skin, in view of the upward curve of military aviation.

Horsehide leather is in only slightly better case, since the Army is counted on to take at least three-quarters of the horsehide production for gloves.

Altogether it may be a lucky animal of any kind that can wander around the country for the next year or two and keep his skin on.

THE TRADING POST

Montgomery Ward Expects

In a recent issue Business Week reported (BW—May 23 '42, p. 58) the reaction in Washington to what the U. S. Conciliation Service interpreted as a rebuff administered by Montgomery Ward Co. to Msgr. Haas, Special Commissioner of Conciliation, who had undertaken to conciliate differences between the company and the C.I.O. union of mail-order, warehouse, and retail employees.

On receipt of word of this situation from Washington, our staff made direct contact with the company to get a full statement of its position. This effort was unsuccessful.

However, in a statement it has since issued and widely circulated, Montgomery Ward takes exception to the Washington version of the situation as covered in the report. In line with Business Week's established practice of presenting all sides of controversies, so far as the participants are willing to make them available, these extracts from the company's statement are offered to get into the record its interpretation of the salient facts:

Msgr. Haas talked separately with representatives of the company and the union with respect to the issues of the dispute, and called a joint meeting of the respective bargaining committees at which the issues were fully discussed. Although Msgr. Haas' efforts of conciliation were not successful, it is not true that he "failed to begin conciliating." Authorized representatives of the company were available at all times to confer with Msgr. Haas, and did confer with him each time he requested. In no instance has the company ever refused to talk, through authorized representatives, with Mr. Steelman's (head of U. S. Conciliation Service) commissioners.

Exception is taken by the company to a statement that Leonard Levy (head of the union), was brushed off with a "nothing doing" when he told company officials early this year that he expected them to recognize his union and bargain with it:

Levy did not "early this year" or at any time prior to the Labor Board's certification, request the company to recognize the union or to bargain with it. A fortiori, Levy did not get "brushed off" with a "nothing doing."

To a statement that the company declined to accede to a request by NLRB that it submit to a check of union cards against payroll records to determine the union's strength, or to agree to an election to determine whether it had a majority, the company replies:

The company, at no time, objected to the Labor Board's checking union cards

against payroll or holding an election. A dispute existed between the company and the union with respect to what constituted a proper bargaining unit, and the hearings were held to resolve this issue.

* * *

The report cited the feeling of the union representatives that the company negotiators had no power to make decisions and that unless Sewell Avery (president of Montgomery Ward) either gave them that power or took part in the negotiations himself, the union would be forced to consider striking. It cited also the finding of the Conciliation Service that Mr. Avery had not appeared at any of the conferences, that union requests for his presence were turned down, and that there was some question as to the power of the company representatives to reach an agreement. To this the company replies:

The company was represented at each meeting with the union committee by authorized representatives. It is not true that "the company negotiators had no power to make decisions" or that "there was some question as to whether the company representatives were empowered to reach an agreement." The union committee at no time requested that Mr. Avery meet with them. It is not true that "Sewell Avery could not be induced to take part in the negotiations" or that that "was the reason for lack of progress." Neither is it true that "union requests that he meet with the committee had been turned down."

* * *

To a statement that the company refuses to discuss modifications of its labor policy or to make any concessions to unions, the company says:

The company has never refused to discuss with its employees or their authorized representatives any proposed modification of its labor policies or practices. The company has, on many occasions, made changes in its wage rates, its working hours, and various working conditions following requests by its employees or unions representing them. In many cases these wage rates, hours and working conditions have been incorporated in written contracts with unions.

* * *

Reviewing the negotiations that led up to the participation of the Conciliation Service, the company comments:

The list of demands presented by the union committee was composed of twenty separate demands. Each demand was fully discussed and the underlying reasons for the respective positions of the company and the union were fully stated and explained. The negotiations resulted in full agreement on four demands, partial agreement on nine, and complete disagreement on seven. In addition, the negotiations resulted in a better understanding between the company and its employees on several policies and practices. The company's position was not arbitrary, and the negotiations were neither futile nor fruitless.

W.C.



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THE TREND

RESCUING THE RETAILER

Inevitably, retailers are being caught in the vise of declining unit sales and shorter gross margins. The exigencies of the war program, on the one hand, and the price ceilings imposed by the Office of Price Administration, on the other, form a pincer movement that forebodes the snuffing out of many a shopkeeper's business life.

• Because the retailer produces nothing that will fit the mouth of a cannon, and often outbids the Army, Navy, and Lend-Lease for merchandise, he has inferentially been led to believe that there is nothing that can be done about his impending doom. Yet, now that such a doctrine has gained fairly wide preachment, Washington all of a sudden shows signs of cranking up a program of salvation.

In double-quick time both houses of Congress have passed, and the President has approved, a bill enabling the Reconstruction Finance Corp. to bail out dealers whose inventories (and cash assets) are frozen because of rationing (BW—May 30 '42, p41). OPA has prevailed upon soap manufacturers and the refiners of lard to cut their prices in order to allow the dealer a fair margin. And—most significant of all—the War Production Board, which never did solve the problem of the small manufacturer, now wants to help the shopkeeper by smoothing out alleged inequities in inventories (BW—Jun. 13 '42, p46).

What all of this suggests is that the philosophy of letting dealers die a natural death isn't as simple as it looks. The average grocer or hardware merchant may not know how to assemble a machine gun, but he does know that, if he's squeezed too hard, the black market begins to extend the haunting invitation of a macabre dream. And, best of all, he knows that his local Congressman is there to go to bat for him.

• From the viewpoint of the influences that retailers voluntarily or involuntarily could bring to bear on the war program, they lined up as follows according to the 1939 Census:

Class of Retailer	No. Stores	% of All Stores	Sales (000 Omitted)	% of All Sales
I. All chains and independents with sales over \$100,000	164,815	9.3	\$21,393,786	50.9
II. Independents with sales of \$30,000 to \$99,999	175,344	9.9	8,679,329	20.6
III. Independents with sales from \$10,000 to \$29,999	486,663	27.5	8,228,943	19.6
IV. Independents with sales under \$10,000	943,533	53.3	3,739,732	8.9
	1,770,355		\$42,041,790	

It's apparent that the financial differences among retailers almost automatically divide them into categories of varying sentiment, economic importance, and vocal power (as reflected in Congress). Hence, official treatment necessarily has to follow the same pattern.

Class IV—that of the \$10,000-and-under independent—is in the worst inventory position and, according to OPA, most befuddled by the requirements of the General Maximum Price Regulation. Yet Class IV stands the least chance of getting any major attention. At best, shopkeepers in this category earn \$30 a week. Mortality among them is so high that one study showed a 93.8 death ratio over a period of five years for establishments with a net worth of \$10,000 or less. Official salvation would have to cover the proprietors of nearly a million stores who are politically unorganized, who are often able to earn a greater wage in other industries, and whose potential weight in a black market would be small because of their low aggregate sales (less than 10%) and equally low stocks-on-hand (only about a 7% increase since last year).

Class I—at the other end of the scale—will probably be deemed big enough to absorb most any shock. For the major retailers, and especially the chains, to ask gracefully for outright help would be a hard job. It would stir up too much fuss. They must comply punctiliously with every government regulation because they stand well out in the limelight. And in the last analysis, no big retailer can afford to close up shop in the immediate future. That would be tantamount to dissipating the value of his name while inviting disastrous taxation on the distribution of assets.

• The medium-sized retailer, then, is the nub of the problem. Comprising 37% of stores doing 40% of the retail dollar volume, this classification furthermore numbers 650,000 active proprietors and 1,825,000 employees (a mighty chorus of potential votes). Here is where 46% of the nation's food-store business is transacted; 38% of the apparel business; 44% of the furniture-household-radio business; 66% of hardware; 62% of drugs; 53% of packaged liquor.

Incidentally, here also is where the interests of the national manufacturer are centered, for the bulk of this business rests solidly on nationally advertised, branded merchandise. Time and again, the medium-sized merchant has indicated that the nationally advertised brand is his bread and butter. The manufacturer can hardly afford the marketing consequences of letting his staunchest supporter falter. And this is an important fact in the situation.

WPB, in the last analysis, has surveyed the problem shrewdly by focusing attention on the next-to-the-big retailer. Whether WPB's inventory control ideas (one regulation already has been junked, and a new one is in the mill) will provide the correct answer is beside the point. For this much appears to be true: The sights are set right for the primary source of trouble.

The Editors of Business Week

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